

# **Building Pathways for Future Learning with Japanese Lesson Study**

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**Abstract:** The purpose of this paper is to report on an qualitative action research study that was conducted in an elementary school in order to examine teacher perceptions of Japanese Lesson Study as a method of professional development.

Of all aspects of teacher 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 adults, in this case teachers, with opportunities for practice-based professional development opportunities (Stigler & Hiebert, 1999). There has been relatively little attention, however, within the fields of adult education or professional development literature, to teacher learning situated in the classroom environment among other adults. Educators must be prepared to teach effectively in the schools of the 21<sup>st</sup> century and be provided with continuing professional development support that enables them to be lifelong learners. Teacher education is a form of adult education, therefore professional developers need to be aware of what the research says about adult learning principles. Teachers need to be provided with environments and opportunities that help them develop habits of learning that will prepare them to address the changes that they face (Fullan, 2007). The Common Core State Standards initiative puts many rigorous and newly organized standards in the hands of teachers. For this reason, it is clear that continuing education of teachers is important to be able to meet the demands of changing times and the examination of how we are supporting teacher learning is necessary.

Learning according to Lave and Wagner, (1991) is context dependent and situated within the context in which it occurs. Further examination of teacher learning situated in the classroom setting will add to the research on professional development. To date, there have been a number of studies on Japanese Lesson Study as a form of professional development in order to explore its usefulness in improving teacher instruction in the area of mathematics (Lewis, 2002; Rock & Wilson, 2005; Doig & Groves, 2011). There is a need for research that examines the supporting conditions that enable lesson study to be successful at particular sites (Rock & Wilson, 2005). In response to this concern, the purpose of this action research study was two fold: a) to explore teacher perceptions of Japanese lesson study as a method of professional development, and b) to take teachers through an action research process as they observed the implementation of a literacy lesson in the classroom. As action research seeks to address a problem found in practice, English Language Arts will be the focus of classroom lessons. The district where the study took place, sought to improve upon their language arts block through the professional development of teachers. The point of this study was specifically geared to the use of Japanese lesson study as a form of professional development for teachers that teach English Language Arts.

## **Theoretical Framework**

A sound theoretical framework to support the use of Japanese Lesson Study is Situated learning theory as it supports the implementation of professional learning in the classroom setting (Lave & Wagner, 1991). Teacher dialogue about instruction as it happens within the classroom could elevate teacher learning. Japanese Lesson Study supports this as it situates responsive learning in the context of the classroom. Literacy instruction in the classroom could be studied using the Japanese Lesson Study model to better understand situated learning theory and how it relates to teacher perceptions of professional development and effective English Language Arts instruction.

Situated learning theory challenges the perception that learning is a cognitive process that takes place solely in the minds of individuals (Fenwick, 2000, p.253; Greeno, Smith, & Moore, 1992). It views learning as a collaborative process in which people engage with tools and the environment in which they will be used (Cobb & Bowers, 1999). Knowledge and learning are understood as indistinguishably integrated with the setting in which it occurs. Lesson study can be utilized for this assimilation of knowledge and learning in the classroom. Situations, such as those observed during lesson study, might be thought to co-produce knowledge through activity (Brown, Collins, & Duguid, 1989). Japanese Lesson Study, a model of professional development situated in the context of the classroom, engages teachers with the tools and culture found in the classroom, resulting in rich knowledge about instruction.

Situated learning theory reasons that knowledge is socially constructed and learning occurs through participation within a community. These communities are referred to by Lave and Wenger (1991) as communities of practice. 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 social learning that is part of communities of practice gives meaning to the collaboration that is a part of the Japanese Lesson Study Method. During Japanese Lesson Study teachers are provided an opportunity to collaborate over an extended period of time about the tools and culture of the classroom in order to gain a better understanding about instruction and how it benefits students.

### **Methodology**

This qualitative action research study consisted of seven grade five literacy educators that work in a public school in Lancaster County. The overall design of this study made use of qualitative and action research methods; it was intended in its action component to understand the perceptions of professional development among literacy educator participants. Key approaches to action research, in particular classroom action research includes qualitative, interpretive modes of inquiry and data collection by teachers, whereas teachers make judgments about how to improve their own practice (Kemmis & McTaggart, 1998). This approach connects directly to the Japanese method of Lesson Study utilized in this study, in which teachers seek to improve a problem found in their practice through a teacher-led professional development model. It supports the professional development of practitioners by helping them become more competent in understanding and applying research findings directly to the classroom setting (Gall, Gall & Borg, 1999).

For the purposes of this qualitative action research study the process of analysis was based on the interviews, the critical incident questionnaire (CIQ), journals, and documents. The data were analyzed to understand teacher perceptions of Japanese Lesson Study as a model for professional development in literacy. 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.

### **Findings**

The understanding of how teachers learn today is essential to those designing staff development experiences for educators. What they bring with them to the classroom setting ultimately influences the way they interpret and apply professional learning sessions. In order to further understand teachers as adult learners it was important to see how their past experiences influenced them as educators. For the purposes of this study, it was necessary to understand what background knowledge and understandings participants were bringing with them to the learning sessions. Based on the data from the preliminary interviews, four themes emerged including: (a) influential prior educational experiences; (b) barriers to teacher professional learning; (c) effective professional development practices; and (d) concerns of Japanese Lesson Study. Further adding to the understanding of situated learning theory, the findings revealed the essential components of adult professional development including collaboration, learning in context, critical friends, and increased comfort levels. In addition, the descriptive data collected as the teachers moved through the phases of action research added to the understanding of how adults move through phases in their learning. The adults in this study who were initially overwhelmed by this in-depth and continuous professional development became excited about the prospect of continuing this type of professional learning. The power of a team was realized as they valued time to collaborate, teacher experience, and feeling productive as a result of the Japanese Lesson Study process. Furthermore, learning in context among grade level peers was recognized as essential to instructional improvements that resulted after this experience. Learning in context through observation elevated teacher awareness of instructional practices used by their peers. The research revealed that teachers appreciated discussions about classroom specific topics, as well as time to observe peers in action during the JLS process. Observing teachers was a hard task for some because as teachers, they do not often have the opportunity to develop a trained eye to observe lessons critically. Furthermore, teachers are not trained on how to observe lessons, as this is typically an administrative responsibility. Therefore, during this study teachers had a hard time providing critical feedback to each another. Surprisingly they also had a hard time receiving positive comments about their lesson. Teachers in this study commented that they are not used to being praised for their work.

Final reflections resulted in a deeper understanding of teacher perceptions of Japanese Lesson Study. As a result of this learning process, teacher comfort levels increased in the areas of Common Core State Standards, reading instructional methods, and student engagement. 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.

As evidenced by the study results, teachers are influenced by the context in which they learn. This is important to consider as teacher training sessions are often removed from the sites where they feel most comfortable.

### **Conclusion**

The findings of this study reveal a complex process of adult learning that is often overlooked when planning professional development for educators. This study is significant to the field of adult education in that it brings understanding of how to foster effective professional development experiences for teachers (Gregson & Sturko, 2007). It also offers insight about the limitations and benefits of using a professional development framed theoretically by situated learning as well as offering new understandings about the theory itself (e.g., role of relationships, the importance of safe context). According to situated learning theory (SLT), learning is best understood in relationship to the context/situation in which it occurs (Bell, Maeng & Binns, 2013). 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. JLS and SLT brought meaning to contextualized professional development as teachers were able to learn where they felt most comfortable. 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 Communities of Practice (CoP) is overlooked in SLT. The teachers in the study were empowered because they felt ownership over the course of their professional development, especially when it related to the needs of the students. They also realized the choice involved in JLS when they were able to select literacy areas that could be improved by increased rigor. Whereas, situated learning theory seeks to explain learning in the context, CoP encourage teachers to dialogue to better their practice thus inspiring those involved via collaboration. Communities of practice are formed by people who share a common concern or passion for something they do, involving members in joint activities and discussions as they build relationships that enable them to learn from each other (Lave & Wenger, 1991; Brown, Collins, & Duguid, 1989). Relationships are overlooked in SLT as interactions are not examined as they relate to how people build associations with one another. Relationships lead to collaborative problem solving that would not take place alone. SLT recognizes learning done on the peripheral without an emphasis on learning taking place because of the interaction that results from peer associations which then lead to a relationship. Although, SLT recognizes learning done from a peripheral view; this fringe learning presents itself differently in JLS. Teachers are learning on the outskirts of the classroom when they are observing lessons but they are part of this learning because they helped to create the lesson through a collaborative group. This is part of the empowerment as teachers are part of the designing process the entire time and able to connect it to their personal learning needs.

Furthermore, this study offers insight regarding larger U.S. context about the benefits and limitations of Japanese lesson study as form of professional development for adults. It calls attention to the necessity of creating professional development sessions for teachers that are differentiated based on their needs as it relates to the context of their own classrooms and team members they work with. One of the most significant implications from this study stems from the necessity to change the way we offer professional development for teachers. 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. Further examination of what high-performing countries actually do to build coherent systems of teaching and learning is necessary given the critical importance of education for individual and societal success. Critical analysis of professional development as it happens in other high achieving nations could lead to a better understanding of what is best for teacher and adult learning.

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