District Sensemaking and Implementation of Teacher Professional Development A Case of Lesson Study in Florida

Objectives

Lesson study is an approach to instructional improvement that encourages teachers to collaboratively study student thinking and prior knowledge relevant to their diverse background characteristics, jointly plan and teach a student-centered lesson, and discuss student understanding and learning as a result of the lesson. Lesson study was imported to the United States from Japan in the late 1990s after an international video study revealed that in comparison to U.S. math lessons that focus on lower-level mathematics skills, Japanese math lessons focus on promoting students' conceptual understanding (Stigler & Hiebert, 1999). Despite its foreign origin, lesson study embodies job-embedded, coherent, continuous, and collaborative teacher learning activities (Perry & Lewis, 2009)—the characteristics of professional development empirically shown to improve instruction and student learning in the United States (Borasi & Fonzi, 2002; Loucks-Horsley, Hewson, Love, & Stiles, 1998).

Florida is the first state to promote lesson study as a statewide professional development model for implementing the Common Core State Standards and improving instruction and student achievement using part of the \$700 million Race to the Top (RTTT) grant. The Florida Department of Education (FLDOE) viewed lesson study to be an effective way to reach diverse populations and specified a state requirement on lesson study in 2010 stating that "A local education agency (LEA) with a persistently lowest-achieving (PLA) school will modify these schools' schedules to devote a minimum of one Lesson Study per month for each grade level or subject area" (Florida Department of Education, 2010, p6). Despite the increasing number of districts and schools implementing lesson study in Florida and across the country, there have been few systematic studies of the district policy and implementation of lesson study (Hart, Alston, & Murata, 2011). Since the 2010 mandate by FLDOE regarding PLA's, little is known about how district professional development coordinators made sense of the policy mandate, what policies and approaches the districts have developed to promote lesson study, and what they considered to be important for implementing lesson study.

In order to examine the district policies and practices for promoting lesson study in Florida, we conducted two rounds of statewide district surveys in 2013 and 2014. These surveys have shown that a majority of districts mandated schools to practice lesson study without providing sufficient funding or investing in development of school and teacher capacities (Akiba, Ramp, & Wilkinson, 2014; Akiba, Howard, Wilkinson, & Whitacre, 2015). To make lesson study practice feasible within the time and funding constraints, many of them modified the lesson study to be a short-term district-driven process that can be completed in 2-4 days (Akiba et al., 2015).

This case study investigates how districts decided to approach promotion of lesson study focusing on their sense-making process of the state mandate, district organizational contexts, and their own values and beliefs about professional development. Based on interviews of professional development representatives in ten districts that have taken different approaches to promote lesson study, we addressed the following research questions:

- 1. How did districts make sense of the state policy mandate on lesson study and respond to it?
- 2. How did district perceive the effective way of promoting lesson study and develop district policies and approaches to support teachers' practice of lesson study?

Theoretical Framework

This study used sensemaking theory to understand how districts place new information into preexisting cognitive frameworks. Sensemaking theory has shown that the instructional practices of educators is influenced by their prior knowledge, the social context within which they work, and the nature of their connections to the policy or reform message (Coburn, 2001; Spillane, Reiser, & Reimer., 2002). What actually occurs in education is based on how information from the environment is deciphered, how meaning of that information is constructed in specific contexts, and then how those interpretations are implemented (Porac & Thomas, 1989; Weick, 1995).

Sensemaking theory argues that when the policy message and the meaning of information or events is not explicitly stated, administrators and educators must make sense of the messages they are receiving and must actively construct understandings and interpretations (Coburn, 2001; Spillane, 1999; Spillane & Jennings, 1997). Previous studies have also identified that the existing organizational contexts play an important role in the sense-making process by influencing the understanding of the new idea that is feasible within the organizational structure and routines (Coburn, 2005; Spillane, 1998; 2000). Thus, we paid attention to organizational contexts, including routine practices and resources, in understanding how district leaders made sense of the state policy on lesson study and developed district policies and practices for supporting lesson study.

Methods and Data

Based on results of the survey conducted in 2013 and 2014, ten districts that had made a considerable commitment to the implementation of lesson study were selected to be interviewed for the case study. A total of 18 individuals including professional development coordinators, instructional coaches, and principals who are most familiar with the district-level implementation of lesson study from these 10 districts participated in the interview. Table 1 shows that these 10 districts vary in size, poverty level, and diversity levels, and they are located across the state. The interview asked them to share: 1) the origin and history of lesson study practice in the district, 2) specific approaches (e.g., facilitation, training, funding, and resources) taken to promote lesson study and the reasons behind them, 3) current level of lesson study practice in the district, 4) challenges and successes the district experienced in promoting lesson study. Each interview lasted between 45 - 150 minutes and was transcribed verbatim.

The interview transcripts were carefully reviewed by the researchers who first coded the content openly using general themes including "training," "compliance," and "time constraint." We met regularly to discuss coding and finally identified the themes that address our research questions. In analyzing data, we paid attention to the assumptions and premises underlying the district approaches and analyzed how existing organizational structures, routines and beliefs surrounding professional development influenced their approaches to promote lesson study.

Results

The interview data showed that the professional development representatives from 10 districts expressed a lack of guidance, policies and procedures from FLDOE regarding the implementation of lesson study. As a result, the districts used their prior knowledge and social contexts to make sense of the policy messages, in ways that both morphed and adapted the lesson study model to fit the localized needs, time and funding constraints of the individual district.

Although the specific models of lesson study varied across the districts, the interview data showed that there are several commonalities to case study districts.

Most districts learned about lesson study either from FLDOE-sponsored trainings through the Race to The Top funding or exposure from small pockets of lesson study implementation that had emerged since lesson study was imported to the United States. In developing district approaches to promote lesson study, districts appear to understand that in teacher-driven professional developments like lesson study, teacher buy-in is essential to its successful implementation, expansion, and sustainability.

In establishing teacher buy-in, understood by all the districts as essential to the growth and sustainability of lesson study, two district models emerged. Some districts started with a small group of volunteers consisting of high-performing teachers. These informal teacher leaders or school leaders would serve as a catalyst to spread lesson study through teacher interactions. These districts considered that lesson study practice needs to be driven at the school level. These districts allowed local discretion in the lesson study process to help foster both teacher and school buy-in and trust. These lesson study groups selected the subject of their lesson study, materials to be used, and lesson study meeting times in consultation with school principals. To help build rapport and support for lesson study, the districts also coupled lesson study with other reform iniatives to lessen the burden and responsibilities of the teachers. These included valuing lesson study practice in teacher evaluations and using lesson study to unpack the Common Core Standards. In this "bottom-up" approach, the districts attempted to capture administration buy-in by capitalizing on teacher buy-in.

Alternatively, some districts developed a more formal structural implementation of lesson study controlled at the district level and facilitated by district coaches or specialists as a way to establish principal buy-in, which would ultimately help foster teacher buy-in. Principals are a key component since they control much of the funding and ensure that teacher professional development is in alignment with school and district priorities. Many of the decisions such as choice of lesson study subject, materials to be used, lesson study meeting times, and data analysis were made by the district level personnel. Common to these "top-down" districts was that these districts desired to keep control of the implementation in an attempt to preserve the fidelity of the process.

Discussion and Scholarly Significance

The interview results showed that all district representatives appear to understand that a teacher-driven professional development like lesson study requires teacher buy-in to be successful. However, the districts have taken two distinct approaches to generate teacher buy-in. Some districts attempt to capture teacher buy-in by giving teachers major decision making input into the lesson study protocol. These "bottom-up "districts use small pockets of highly effective teachers to generate curiosity and spread the reform iniative throughout the district. Ultimately, the purpose is to capture administrational buy-in, again viewed as essential to the overall implementation success, growth, and sustainability of lesson study.

Other districts similarly understood the importance of teacher buy-in but they used a more top-down approach in an attempt to capture the teacher buy-in. In these "top-down" districts, the implementation protocol and many of the lesson study decisions are made by the district level personnel. These "top-down" implementers appear to seek buy-in from the administrators first by creating a more organized, rigid structure for lesson study facilitated by district instructional leaders, which reduces the burden on the administrators. Based on the belief

that schools need to offer multiple professional development opportunities, these districts considered that the "top-down approach" to lesson study seems to appeal to the principals as a feasible option and likely draw teacher buy-in.

Examining how district leaders make sense of a promising professional development model such as lesson study allows us to understand what types of policies and approaches districts use to support teachers' professional learning. This case study revealed that without explicit guidance, district leaders made sense of a new state policy and considered teacher buy-in to be a critical factor for a successful practice of lesson study. The differences in their beliefs about how to gain teacher buy-in led to different district approaches to promote lesson study. Their beliefs were influenced by their ideas about teacher professional development, organizational contexts including time and funding constraints, and the routine practices the district has taken for many years.

Lesson study is a teacher-driven professional development that requires a substantial commitment and buy-in by both administrators and teachers. Further research into the growth and sustainability of lesson study by these two approaches will reveal which, if either, is more effective in lesson study practice for improving instruction and student learning.

	District	Interview participants	N of LS schools	Size	% FRL	% Minority
1	District A	Director of Professional Learning 3 instructional coaches	27	129,545	49.2	61.5
2	District B	Coordinator of Professional Development 2 instructional coaches	27	64,058	39.3	38.9
3	District C	Director of Professional Development Instructional coach	46	165,881	40.6	69.5
4	District D	Director of Instruction Teacher leader	5	3,560	54.1	30.5
5	District E	Chief Academic Officer	4	4,738	34.3	18.7
6	District F	Director of Curriuculum Principal	5	2,169	64.5	14.7
7	District G	2 instructional coaches	6	32,791	52.2	61.3
8	District H	Program coordinator	1	5,744	-	33.8
9	District I	Instructional coach	2	23,170	18.5	19.9
10	District J	Director of Reform 2 principals	20	181,776	47.7	62.3

Table 1: District Case Study Participants

References

- Akiba, M., Ramp, L., & Wilkinson, B. (2014). Lesson study policy and practice in Florida: Findings from a statewide district survey. Tallahassee, FL: Florida State University.
- Akiba, M., Howard, C., Wilkinson, B., Whitacre, I., (2015). Lesson study policy and practice in Florida: Findings from a statewide district survey. Tallahassee, FL: Florida State University.
- Borasi, R., & Fonzi, J. (2002). Professional development that supports school mathematics reform (Vol. 3). Division of Elementary, Secondary, and Informal Education, Directorate for Education and Human Resources, National Science Foundation.
- Coburn, C. E. (2001). Collective sensemaking about reading: How teachers mediate reading policy in their professional communities. *Educational evaluation and policy analysis*, *23*(2), 145-170.
- Coburn, C. E. (2005). Shaping teacher sensemaking: School leaders and the enactment of reading policy. *Educational Policy*, 19(3), 476-509.
- FLDOE, Florida State Department of Education (2010). Final scope of work. Tallahassee, FL: Author.

Hart, L. C., Alston, A. S., & Murata, A. (2011). Lesson-study research and practice in mathematics education: Learning together. New York: Springer

Loucks-Horsley, S., Hewson, P. W., & Love, N. "& Stiles, K. (1998). Designing professional development for teachers of science and mathematics.

- Porac, J. F., Thomas, H., & Baden-Fuller, C. (1989). Competitive groups as cognitive communities: The case of scottish knitwear manufacturers*. *Journal of Management studies*, 26(4), 397-416.
- Perry, R. R., & Lewis, C. C. (2009). What is successful adaptation of lesson study in the US? *Journal of Educational Change*, 10, 365-391.
- Spillane, J. P. (1998). A cognitive perspective on the role of the local educational agency in implementing instructional policy: Accounting for local variability *Educational Administration Quarterly*, 34(1), 31-57.
- Spillane, J. P. (1999). External reform initiatives and teachers' efforts to reconstruct their practice: The mediating role of teachers' zones of enactment. *Journal of curriculum Studies*, *31*(2), 143-175.
- Spillane, J. P. (2000). Cognition and policy implementation: District policymakers and the reform of mathematics education. *Cognition and Instruction*, *18*(2), 141-179.
- Spillane, J., & Jennings, N. (1997). Aligned instructional policy and ambitious pedagogy: Exploring instructional reform from the classroom perspective. *The Teachers College Record*, 98(3), 449-481.
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of educational research*, 72(3), 387-431.
- Stigler, J. W., & Hiebert, J. (1999). The teaching gap: Best ideas from the world's teachers for improving education in the classroom. New York: The Free Press, A Division of Simon & Schuster Inc
- Weick, K. E. (1995). Sensemaking in organizations (Vol. 3). Sage.