

Individual and Group Learning Paths in Lesson Study

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Collaborative Inquiry and Teacher Learning

As the STRIDE team explores how to frame teacher collaborative inquiry and how to understand its process, I am interested in studying what happens in the process. In a collaborative inquiry context where individuals learn together, the interactions among different members' learning become visible as they frame the group's learning as a whole. Learning is a social endeavor when multiple individuals' learning paths are meaningfully embedded in the group's learning path. Most learning happens in social settings (e.g., schools, work places) in the presence of others, and it is important to understand the dynamics created among interactions of ideas in such settings. I am interested in investigating this interactive process by focusing on teacher learning with lesson study.

Brief Overview of Lesson Study

Lesson study is a collaboration-based teacher professional development that originated in Japan (Lewis, Perry, & Murata, 2006; Lewis and Tsuchida, 1988; Murata, in press). In lesson study, teachers set goals (may involve student pre-assessment), plan a lesson (by examining curricula, standards, content), teach a lesson (while others observe and collect data), debrief the lesson (based on the data collected), and reflect on their own learning. In the process, the teachers have multiple opportunities to deeply think about aspects of teaching, express/expose what they may not be sure about, ask questions to and get answers from their peers and knowledgeable others, and continuously discuss and learn more about student learning of the content at hand together (Murata, in press; Murata and

Takahashi, 2002). Lesson study places teachers in the center of the professional process, and it supports teachers' professional growth by helping develop 1) knowledge and beliefs, 2) professional community, and 3) resources (Lewis, Perry, & Hurd, in press; Lewis, Perry, & Murata, 2006; Murata, Lewis, and Perry, 2004).

Teacher Learning in Lesson Study

When lesson study was first introduced to the countries outside of Japan in early 2000s, it was considered by many to be a way to develop good lessons (e.g., Stigler and Hiebert, 1999). It was explained that, in Japan, there is a large and comprehensive library of lessons that was developed through lesson study (true but only a superficial introduction to the much bigger process), and that was somehow highlighted as a goal of the process. Now that lesson study has been implemented in the U.S. for several years, we realize that lesson study is much more than merely about good lessons. Lesson/resource development is only a small portion of the process, a point of focus, while the benefit of lesson study goes far beyond: teachers develop knowledge (subject matter as well as teaching), shift their beliefs (how best to support student learning), and share a sense of professional community (mutual accountability, norms that emphasize inquiry and continuing growth) (Lewis, Perry, & Hurd, in press). If we narrow the goals of lesson study only as resource development, the contributions teachers make may only be recognized if they have a direct relationship to the resource being developed. However, teachers' understanding of their practice is highly multi-dimensional, and what may not appear to be directly connected to the lesson/resource can be relevant in the teaching context at hand. In the meantime, each teacher will also take different aspects of their shared learning experiences to be a part of his/her new understanding and bring it to his/her own classroom in the future.

Individual and Group Learning Paths in Lesson Study

Figure A attempts to illustrate how individual and group learning paths may interact in the lesson study process. The gray center of the larger green cylinder is a learning path solely based on resource development [The belief behind considering the learning this way may be that teachers learn best by developing concrete resources that are directly relevant to their practice.] The gray center is embedded in the green circle for which teachers' different kinds of understanding are embedded (shown in the figure to the left). It is one way to consider the resource created as a representation of teachers' learning, a condensed reflection of the process, but that overly simplifies the process and ignores different types of understanding teachers bring to and take from the collaborative process. In order to understand dynamic interactions that frame the learning process, it is essential to broaden the perspective and investigate interactions of ideas.

In planning and teaching a lesson, teachers are likely to think broader and focus on more than just resource development. Teachers may think about their own particular group of students, new curriculum they are adopting, or local policy that affects their teaching (shown as segments of the green circle). And, these different ideas interact and frame their collaborative work in important ways. If we broaden the learning goal and consider the process in which teachers bring in different understanding as a part of their learning, the larger green cylinder is a better representation of the group's learning process/path. In such a collaborative inquiry setting, different teachers' ideas interact with one another (shown with blue arrows), and the interactions support their learning as a group and as individuals. In Figure A, individual teachers' learning paths, which may include more than one section of the green circle at any given moment, will move forward to make better connections of

different types of understanding in the process. The arrows also interact with each other in the group to challenge one another's ideas and enrich each other's thinking. Individual paths may, at times, go outside of the group's learning path, but a collaborative and interactive inquiry context pulls teachers' learning together. Teachers push and extend each other's learning in the process by asking questions, sharing ideas, and receiving feedback. The group has a shared goal of planning and teaching a lesson; therefore, the task at hand is meaningful, concrete, and immediate. Using "a lesson" as a focus, teachers share different ideas and tessellate them to frame the group's and individuals' learning.

In any learning setting, a learner (teacher, in this case) in the context takes his/her own meaning of the experience based on his/her interests, backgrounds, beliefs, and prior understanding. And, the meaning he/she takes is more than likely to be different from the meaning others take. In some learning settings, it is considered that learning should be uniform across individuals; thus, the experiences can be often strictly dictated and constrained (e.g., one-time professional development lecture and workshop). In such an environment, learning can lack authentic meaning, as individuals are not allowed to make their own connections with the concepts at hand. On the other hand, in the collaborative learning environment, such as lesson study, differences among learners are expected and welcomed. The diversity of thinking provides the fuel for the learning. Different learning paths individuals take interact with one another in the context, and the interaction allows for a broader learning range than what the originally planned instructional path may afford. In collaborative discussions, different members push and extend each other in and out of the general learning path, and this movement helps everyone involved in the context to

understand the topic better, as one is likely to push back when he/she feels the discussion derails too far.

This is merely a starting point of the conceptualization of how individual and group learning paths may interact in lesson study. I intend to further articulate the emerging ideas in the future as I continue to work with teachers in lesson study.

References

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