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How Lesson Study Travels: Cases of Why and How It is Taken Up in US Settings

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In a world that some, like Friedman (2005), have described as ‘flat’ where exchange across national borders grows each year, there is enormous interest in learning from other countries’ approaches to improving teaching and learning. Lesson study has emerged as a powerful and potentially transformative practice. In the context of heightened international communication, it has become a kind of ‘traveling’ idea (Thompson, 2013), although not one formally mandated by states. Research by scholars in the US (Lewis & Tsuchida, 1998; Stigler & Hiebert, 1999; Fernandez & Yoshida, 2004; Lewis, Perry, & Murata, 2006) introduced lesson study to the United States, describing a practice widely known in Japan. Scholars have worked to note the challenges of its adoption in the highly individualized traditions of US teaching (Choksi and Fernandez, 2004) and outline productive approaches for its implementation in US school communities (Lewis & Hurd, 2011; Lewis, Perry & Hurd, 2009).

This paper does not attempt to examine how lesson study is best adopted to US schools. Instead, its purpose is to recognize and unpack a variety of contexts, within the US, in which lesson study might be taken up, and consider the significance of context for its adoption. We examine a variety of cases in which lesson study has been introduced and adapted to particular teaching contexts. The paper explores the introduction and experience of lesson study in 5 different sites, all located within the same state and educational community: elementary classroom teaching, in partnership with a university researcher; high school teaching in partnership with a university professor; two different preservice courses (one aimed at students during their teaching practicum, the other before their practicum); and a university statistics course. Across the five cases, the subject area focus, the level of classroom teaching, as well as the career stage of the participating teachers vary. All nonetheless reflect ‘US’ traditions of teaching and learning, and all involved teachers who were needing to respond to local curricular and policy demands while still engaging in learning new practices, working in new kinds of collaborative arrangements, and taking on new habits of mind through their use of lesson study.

Using interview and document analysis, the study examines the original motivations to adopt lesson study, teacher and facilitator/outside ‘expert’ conceptions and understandings of the practice, challenges and successes in implementation, and adaptations and transformation of lesson study and of teaching practice through the course of the use of lesson study. By examining a set of cases, we can look both within and across these stories of teachers transforming their practice. Understanding the attraction of lesson study, the shared challenges as well as site-specific issues can inform a more nuanced understanding of how this ‘traveling’ idea finds its home in different contexts.

The importance of the ways lesson study was introduced in each case emerges as a crucial dimension in understanding how it was experienced by teachers. These findings call for increased energy in studying the role of those engaged in helping other teachers ‘learn’ lesson study. Just as the field has come to see the importance of lesson study as a form of teacher learning, this paper argues that, in contexts like the US, where

the practice is introduced as a 'new' or 'foreign' idea, there is a need to unpack the work of the 'teacher of teachers'

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Lesson Study Groups as an Effective Form of Teacher Development

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Change the school can only teachers, constantly increasing their professional level. The main responsibility of the school director is the organization of a system of continuous professional development of school teachers. In this regard, one of the most effective forms of such a system may be the work of study groups (hereinafter: LS groups).

On the course of school principals, we aimed the directors to create in groups such groups of 4-6 people who could be self-governing self-regulating, self-governing cells of the school community of educators.

To translate this work into action on the courses, we determined the following stages of LS groups' work:

1. Creation of LS groups, in which, if possible, to include the majority of school teachers (if not all), preferably by their own wishes.
2. Definition of the topic (problem) of the study.
3. Resolution of theoretical questions: selection of resources, reading of literature.
4. Conducting coaching within the LS group to choose the means of solving the problem (what and how to apply ideas, methods, techniques).
5. Joint lesson planning.
6. Selection of monitoring tools and interviews.
7. Conducting a lesson, observing students, and interviewing them after classes.
8. Analysis (discussion) of the lesson: improving the lesson plan, specifying the problem or identifying the other parties for the next lessons. Announcement of research results.

We created the Regulations on the functioning of LS groups, where they defined the basic rules of the work and where, in addition to the 8 items mentioned, included the sections "How to control the work of LS groups" and "How to support the work of LS groups".

We agreed that the LS groups will have a relative freedom: within a quarter they should work independently in accordance with the Regulations on the work of LS groups. However, this does not mean that the work of LS groups is not controlled in any way: groups should work together with other groups at least once every two months or invite an expert (an experienced teacher) to receive feedback on making changes in their activities.

During the holidays, you can sum up the work of LS groups. Such forms of assessment and control include mini-lessons by groups, preparation of a portfolio, presentations with summing up of work, analysis and announcement of opinions (for example, by results of an aketing) and student achievements, rating, teacher writing reflective works, etc.

After summarizing the work of LS groups, the school can determine the parameters for the subsequent development and improvement of its activities.

Currently, 60 school principals are starting to work on this system. At the end of the first quarter we planned to sum up the preliminary results of this work.

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Integrating Indigenous Knowledge in Teaching Science through Learning Community

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Indigenous knowledge in society is getting shifted by globalization. This study aims to integrate indigenous science with modern science to support the native student in learning and to gain interest in science. Theoretical studies were used to combine both of knowledge through the review literature on the curriculum of science education and cultural, social learning. The integration of indigenous science in the modern science can be initiated by learning community through identifying material or concepts that are considered to be related to indigenous knowledge following the requirements of each school and students. This elaboration based on an understanding of teacher content knowledge, basic student knowledge, and sociocultural conditions of the community. Further, learning community reflecting the consequences of each culture perspective, taking the impact of conceptualization from the implementation, and considering the value, ethics, and wisdom of the concept and the last is evaluating the results of the original science elaboration process for individuals and groups. The role of learning community has intentional, where the teachers should rethinking how useful indigenous science for the student.