

# **WALS Webinar**

## **Methods and Methodological Challenges of PhD students and Young Researchers in Lesson/Learning Study Research**

8th September 2020, Tuesday

### **1. Does Lesson Study Influence Teachers' Perceptions, Understandings and Actions Relating to Inclusive Practice with Regards to Special Educational Needs in Mainstream Primary Mathematics Classrooms in the Republic of Ireland?**

Dennis Mulligan, University of Lincoln, England.

The inclusion of Special Educational Needs (SEN) learners is accepted mainly as customary practice in the Republic of Ireland. Yet, it appears that there is a gap between the knowledge and theory of SEN and the actual practice in primary mathematics. Facilitators of teacher professional development (PD) play a pivotal role in supporting schools in the inclusion of SEN learners in the mainstream setting. This presentation will explore the methodology used to investigate teachers' perceptions, understandings and actions relating to inclusive practice with regards to SEN in mainstream primary mathematics using Lesson Study as a form of sustained teacher PD and learning. This study took place during an academic year that was interrupted with the Covid-19 lockdown, and so there were additional unplanned and unforeseen methodological challenges as a result. This double case study follows two primary schools as they develop a Professional Learning Community (PLC) and engage in the Lesson Study process to support their PD regarding the inclusion of SEN learners in primary mathematics. Underpinned by the Teaching for Robust Understanding (TRU) framework in mathematics (Schoenfeld, 2018) and Dudley's (2013) case study pupils, the Lesson Study cycle is framed by experiencing mathematics through the eyes of the child, and in this case the SEN learner. A range of qualitative research methods was used to gather data including semi-structured interviews (pre and post) with teacher participants, focus groups, researcher and teacher reflections and lesson observation schedules.

### **2. Lesson Study or Prosecco: A Research Method. Marketing Education Localized, Relevant and Sustainable**

Mary Lynn Renton, University of Leicester, England.

My research explores the impact of developing and delivering two *glocalised* (global+local) higher education marketing lessons on student and teacher engagement at a Western cross-border college operating in the Middle East. The premise is the argument that business education benefits from being locally engaged and that this need is amplified in a cross-border setting. This approach acknowledges that Western business concepts may be useful and relevant in the local environment but makes efforts to identify and recognise local practices which may be equally applicable and even superior in the local environment. Desiring an approach, that could make teachers self-sufficient, regardless of administrative support, Lesson Study (LS) was employed as the method for designing and implementing the *glocalised* lessons. The project included two separate LSs, one conducted in the spring of 2019 and the second in the fall of 2019. Each study began with an introduction to Patel's work on glocalisation in cross-border education (2017, 2013). During each study, primary data was obtained from lesson preparation meetings, individual questionnaires, interviews, in-class observations, and lesson and assessment artefacts. At this stage, the collected qualitative data is currently being reviewed and summarised using inductive analysis to identify key patterns and themes. As the data and research methods are being reviewed questions are emerging. One of the most significant being —does this approach to lesson development and implementation have the necessary elements to qualify as a LS, or are the differences so pronounced that it fails to meet the criteria of LS and warrants being called by another name like Prosecco vs Champagne?

### **3. The Inclusion of Lesson Study in the Italian Teachers' Semiosphere: A Challenge for Research in Mathematics Education**

Carola Manolino, University of Turin, Italy

My general aim is to analyse how the involvement of the Italian mathematics teachers in the Lesson Study practices, to which they are completely foreign, leads to an evolution of their professional practices. My study bases on two networked theoretical frames to study the institutional and cultural constraints that codetermine usual teachers practices and beliefs: the Noosphere (Bosch, Chevallard, García, & Monaghan, 2019) for the institutional component, and the Semiosphere (Lotman, 1990) for the cultural one.

Methodologically, I base on the two frames to develop a semiotic and cultural analysis of the interactions between teachers who participate in the LS. Specifically, I consider the signs produced by teachers, in particular their dialogues during the LS phases, using audio- and video-recordings and a collection of written documents (lesson plans, lesson observation tables and interviews). My first research question is: *How does the inclusion of LS in the Italian teachers' Semiosphere lead to an evolution of teachers' practices?* Three subjects participate in these practices: the LS protocol, the teachers, and myself as an observer-researcher. The signs of the LS evolve on from those I introduce to the teachers. Hence my second research question becomes: *How does teachers' cultural environment influence their practices' evolution?* How to properly

grasp this aspect was the greatest methodological challenge for my research. The difficulty is how to consider the semiotic aspects of teachers' interactions in LS practices and with me as a researcher-observer. The presentation will illustrate the way I am studying teachers' semiotic interpretative activities within their different semiospheres to understand how the insertion of the LS new signs changes their practices and beliefs because of cultural reasons.