

i-Sym-01**Initiation of High Quality Lesson Study with Clear Objective for Students' Development:
The role of textbooks for improving the quality of learning in the case of Thailand****Organizers:**

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On this symposium, we would like to seek for knowing the objective of teaching mathematics through a Lesson Study Project as an achievement of long term development more than decades.

Lesson Study was originated in Japan. A number of researchers in the world have been adopting their ways with their specific themes. In the case of Thailand, especially Khon Kaen University, it was introduced Lesson Study through the internship program for under-graduate students in mathematics with Open Approach (Nohda, 1983; 2000, Inprasitha, 2004; 2015) as for its lesson study theme in the year 2002. With supervisors of Inprasitha, Patanajak, Nohda, Shimizu, Isoda and others, their project began from a few junior secondary schools. Teachers of the project schools began to study Open Approach through the lesson study activity for internship program. At this stage, students-centered teaching approach can be seen well and attitude of teachers and students become positive for mathematics. However, Japanese supervisions such as Shimizu and Isoda recognized that their approach at that moment cultivated students and teachers how to participate and manage their math-class by and for themselves, however they were not well developing mathematics competency by and for themselves and predicted that decreasing of academic skill in mathematics. Under their suggestion, Inprasitha adapted the Japanese Mathematics Textbooks (Gakko Tosho, English 2005 edition) to the project. Through the translation and using their adapted textbook with support of Isoda, the internship students were able to learn the sequence of teaching mathematics to extend the learned knowledge and thinking skills at the following classes. Internship students became graduate students and they researched their internship projects under the name of Lesson Study and Open Approach. Through their survey, many of graduate students used to find the objective of every task in the textbooks from their classroom students which were embedded into their textbooks originally written by Japanese teachers who did lesson study in Japan. It is really new observation for them in Thailand context because they never seen such students ways of thinking and its changes. Now, they become scholars and teaching objectives for mathematics teaching under the sequence of their textbooks.