

**SYM-07***Abstract Number: 20072***Exploring Lesson Study with Knowledge Management**Eric C.K. Cheng, *The Education University of Hong Kong*Tetsuo Kuramoto, *Aichi University of Teacher Education*Chisa Okayama, *Toyohashi Sakae Elementary School*

The subject of this symposium is Lesson Study, the famous Japanese curriculum management approach. Lesson Study has been adopted in educational systems around the world to improve teaching and thus, ultimately, the depth and quality of student understanding. This symposium aims to explore the tacit and explicit knowledge convention and creation processes in Lesson Study by using Nonaka and Tateuchi's (1995) SECI knowledge creation model as the theoretical framework. Besides providing a description of Japanese Lesson Study from the perspective of the SECI model, it will explore the system's effects on cultivating positive school cultures, and teacher autonomy, and on managing subject knowledge and pedagogical knowledge for school improvement. Unpacking the mechanism of the knowledge management process and practices could assist educators in contextualising Lesson Study to their school cultures. The rapid expansion of knowledge in the Information Age has dramatically influenced school curriculum of many countries. Many curriculum reforms have been proposed and implemented for educational development. In Japan, there has been a revival of the Lesson Study approach to improve school systems, and its success has led to adoption elsewhere. Lesson Study could be seen as a research and professional development activity in which teachers collaborate in order to create effective lessons and to examine their own teaching practices (Fernandez, 2002; Lewis, 2002). The implementation of alternative teaching practices usually involves a knowledge conversion and/or creation process to address a specific teacher-generated problem relating to pedagogical practice. Such a process could be explained and articulated by Nonaka's model. The four modes of knowledge conversion in the SECI model are: socialisation, externalisation, combination and internalisation. Socialisation is the process of creating common tacit knowledge through shared experiences in the pre- or postlesson meetings. Externalisation is the process of articulating tacit knowledge into explicit knowledge through a lesson plan or by providing a teaching report in a presentation. Combination is the process of assembling new and existing explicit knowledge into systemic knowledge, such as by creating a new curriculum implementation plan or refreshing teaching methods. Internalisation is the process of embodying explicit knowledge into tacit, pedagogical knowledge, such as having the "know-how" to teach. These four modes of knowledge conversion could create a dynamic process for retaining, transferring and creating pedagogical content knowledge in Lesson Study. SECI was developed by Japanese corporates and is one the most well-known knowledge management models. Using this model to analyse Lesson Study fixes the analytical framework within the Japanese cultural context. The first paper of the symposium provides a description of the relationship between Japanese Lesson Study and Knowledge Management from the perspective of the curriculum management, and explores the effect of knowledge management on cultivating positive school cultures, on providing teacher autonomy, and on enhancing problemsolving skills for school organizations. The second paper explores the knowledge transfer processes and mechanisms of Lesson

Study by using Nonaka and Tateuchi's (1995) SECI model, and illustrate the factors which are critical for the successful institutionalisation of the knowledge management mechanism. The third paper of the symposium discusses the dynamic nature of knowledge creation as it relates to teaching and learning within the Lesson Study context, in a Japanese school, by using the SECI model, Ba and Knowledge Assets (Nonaka et al., 2000).