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Editorial

International Perspectives on Japanese Lesson Study

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This special issue of *Mathematics Teacher Education and Development* has as its focus Japanese Lesson Study as a model for whole-school teacher professional learning. Since Japanese Lesson Study was first brought to worldwide attention through the *Third International Mathematics and Science Study (TIMSS) video study* (Stigler, Gonzales, Kawanaka, Knoll, & Serrano, 1999) and Stigler and Hiebert's (1999) account of Japanese structured problem-solving mathematics lessons in *The Teaching Gap*, there has been phenomenal growth of interest in Japanese Lesson Study as a process for professional development from non-Japanese educators and researchers. Not only Western countries, such as the United States, Australia, and the United Kingdom, but also Asian countries such as Malaysia, Indonesia, Singapore and the Philippines, together with a number of African nations, are attempting to implement Japanese Lesson Study. The papers contributed to this Special Issue underscore this interest in a variety of ways.

While Japanese Lesson Study is the over-arching theme of this special issue, the contributions cover two themes: papers in one theme offer support to those wishing to implement Japanese Lesson Study outside Japan, and papers in the second theme provide examples of a variety of implementations of lesson study outside Japan.

One of the key features of Japanese Lesson Study is the role of the "knowledgeable other", and this role is examined and explained in detail in Takahashi's paper, The role of the knowledgeable other in lesson study: Examining the final comments of experienced lesson study practitioners. While this role may appear less important than the lesson plan developed by teachers, the knowledgeable other provides not only critical commentary, but also advice and thought-provoking questions to help further the intentions of the lesson study group. In his paper, Takahashi examines the beliefs and experiences of three experienced "knowledgeable others" and found that they agreed on three responsibilities for the person in this role—namely "bringing new knowledge from research and the curriculum; showing the connection between the theory and the practice; and helping others learn how to reflect on teaching and learning".

A different form of support for professional development through lesson study is that reported by Lewis and Perry in their paper *Lesson study with mathematical resources: A sustainable model for locally-led teacher professional learning.* In this paper the authors illustrate the development and use of video and written

2

resources for teachers planning for lesson study with a focus on vulgar fractions. The paper describes the resource kit and traces its use and effect on the teachers. Unlike most lesson study research, which tends to be small-scale, the data for this paper were gathered from groups of teachers in a randomised controlled trial in which the groups conducted lesson study supported by the resource kit. These groups were scattered across the United States and were supported only by the resource kit. This is an important study in terms of the sustainability and scaling up of this form of teacher professional development.

The paper by Ebaeguin and Stephens, *Cultural challenges in adapting lesson study to a Philippines setting*, explores well-known challenges in the adaptation of a teaching approach from one cultural context to another. Inter-cultural difficulties may be a likely cause of issues in adopting lesson study in a non-Japanese context, but this paper addresses this issue head-on based on an example from the Philippines. The use of Hofstede's (2001) dimensions of national culture as a basis for their study is critically important as it provides a basis for strategies that may assist in a successful implementation in a non-Japanese context. This paper offers strong support to other implementers of lesson study outside of Japan.

Turning to the second theme, implementations outside Japan, we find that these papers reveal as much about other teaching cultures as they do about Japanese teaching through lesson study.

In his paper *Implementing Japanese Lesson Study in foreign countries: Misconceptions and constraints revealed*, Fujii reports on the adaptations made in implementations of lesson study in African countries, namely Uganda and Malawi, and describes the personal revelations about lesson study that were provoked by these African adaptations. Fujii claims "Lesson study in Japan is like air. Lesson study is so natural that it is difficult for Japanese educators to identify its critical and important features", thus making it difficult to theorise. Observing the lesson study approach in the two African countries was thought provoking, and the thoughts are documented and comparisons made between African lesson study and Japanese Lesson Study. This paper raises important issues for those non-Japanese considering lesson study in their own context.

In her paper, *The bureaucratising of lesson study:* A Javanese case, Kusanagi reports on an implementation of lesson study in Indonesia. She explores the "sociocultural contexts of daily activities of teachers in an Indonesian junior high school and in Japan, in order to increase an understanding of the recontextualisation of lesson study". While recognising the cultural differences between these two countries, Kusanagi points out that even in Japan there are at least five variations of lesson study that have arisen over the years in different parts of the country (Sato, 2012), making a comparison with Indonesia somewhat fraught. However, by focussing on the education system in Indonesia and the administrative responsibilities of Indonesian teachers, Kusanagi is able to examine some significant difference between the Indonesian teachers' educational context and that of Japanese teachers. In the Indonesian education system, a hierarchy of responsibility and a strong examination focus may conspire to undermine some

Editorial 3

aspects of Japanese Lesson Study. As the author points out, some of this sociocultural context in Indonesia may not even be noticed or understood by the teachers themselves. On a more positive note, it is suggested that younger teachers may be less enculturated into a bureaucratic mindset and have more potential to support one another than may be found even in Japan.

These five papers provide an international perspective on the adoption and adaptation of Japanese Lesson Study and the contribution it can make to teacher professional learning. As well as identifying some of the cultural and contextual issues that need to be taken into account when attempting to introduce Japanese Lesson Study in other countries, these papers help to articulate the fundamental characteristics of Japanese Lesson Study that contribute to its successful implementation.

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