

Problem Solving Approaches in Mathematics Education as a Product of Japanese Lesson Study

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What is the product of Lesson Study? Lesson Study is a scientific activity for teachers based on the methodology introduced in the 1880s. In Japan, research topics for Lesson Study are usually shared through the regular revisions of the curriculum and the research movement of several societies. As a result of teachers' efforts to overcome challenges on the topics of Lesson Study, several local theories of teaching are shared. The 'Problem Solving Approach' has been commonly known as a Japanese teaching approach and a theory of teaching for developing children who learn mathematics by/for themselves. It includes teaching about learning how to learn. Other important products of Lesson Study are theories for curriculum, described in teacher's guidebooks as a number of technical terms which are only used by teachers and mathematics educators for sharing pedagogical content knowledge.

Key words: Lesson Study; Problem solving approach; Pedagogical content knowledge; History of education