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Diane Barrett* (dbarrett@sjfc.edu), St. John Fisher College, Dept. of Mathematical & Computing Sciences, 3690 East Avenue, Rochester, NY 14618-3597. *Developing Pedagogical Content Knowledge Through Lesson Study: A Capstone Experience for In-service Teachers in Mathematics and Science*. Preliminary report.

Lesson study is used as a tool in developing pedagogical content knowledge and leadership skills for students in a capstone research course for K-12 mathematics and science teachers. These in-service teachers are seeking a master's degree, which combines both content and pedagogy in the same area as their initial certification from the Mathematical and Computing Sciences Department. The open-ended action research course for this master's program was altered toward a more focused experience. Lesson study was used to promote collaboration within the teachers school communities, to develop their leadership skills and to assist them in focusing more intently on student learning. This new focus required these in-service teachers to concentrate their capstone research on the improvement of their students' learning by means of delving deeper into both their content and pedagogy with the goal of improving student learning in their classroom and beyond. (Received September 27, 2005)