Lesson study is the process of instructional improvement where teachers collaboratively plan, execute, observe, and discuss lessons in the classroom. Lesson study is an integral part of the Master of Liberal Arts (ALM) in Mathematics for Teaching offered by the Harvard University Extension School. This degree program, designed for middle and high school teachers of mathematics, is targeted at experienced teachers, teachers just entering the profession, and mid-career professionals investigating a change to the teaching profession. Many of the students in the program are enrolled in undergraduate courses in addition to the graduate courses in theory and teaching of mathematics. However, students must complete additional coursework to obtain graduate credit for a primarily undergraduate course. To meet the needs of these students, we offer a one-semester seminar in lesson study. The goal of the seminar is to introduce students to lesson study and complete one cycle of the lesson study process. We will describe the implementation of the lesson study seminars in this program. (Received September 26, 2005)