Maria G Fung* (mfung@worcester.edu), Mathematics Department, 486 Chandler Street, Worcester State College, Worcester, MA 01602, and Tevian Dray, Dave Damcke, Dianne Hart and Dianne Riverstone. Math Faculty as Partners in Team Teaching a Non-Euclidean Geometry Course for K-12 Teachers.

We will discuss how the Oregon Mathematics Leadership Institute (OMLI) enabled a team of five instructors, including a master teacher and four mathematics faculty, to design and implement a course on non-Euclidean geometry for K-12 teachers. We will focus on the intense structure of the course, which was delivered in 15 2-hour sessions. We will also discuss the content of the course, which included units on both taxicab and spherical geometry. Finally, we will emphasize the pedagogy of the course, which included hands-on cooperative learning that was carefully orchestrated to ensure everyone’s participation, as well as skilled facilitation that was aimed at eliciting productive mathematics discourse, and thus at improving understanding of mathematical concepts. (Received September 16, 2008)