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Joyce F. Fischer* (jf10@txstate.edu), 601 University Drive, Math Building, Room 470, San Marcos, TX 78666. Closing the Gaps for English Language Learners (ELL) in Mathematics Learning by Improving In-Service Teacher Professional Development Thus Increasing Teacher Content, Pedagogy, and Methods Knowledge.

The Texas Education Agency (TEA) has identified English language learners (ELL), formerly known as limited English proficient (LEP) students, as the lowest performing group on all Texas Assessment of Knowledge and Skills (TAKS) tests, scoring below African Americans, Hispanics, Whites, Special Education students, and the Economically Disadvantaged. For example, in Spring 2003, ELL tenth graders performed at 12% of the MET Standard at 2 standard errors of measurement (SEM) below the panel's recommendation and in Spring 2004 at 8% of the MET Standard at 1 REM below the panel recommendation. The goal for this research project was: to first determine the traits and characteristics necessary for student ELL to achieve high quality mathematics learning, and to relate these traits and characteristics to in-service teacher training administered through workshops and as a Professional Development Model (PDM). Research studies involving qualitative and quantitative teacher and student data from several Texas Valley Schools with high student populations of ELL will be presented to demonstrate the effectiveness of the workshops and the derived PDM on teacher learning, student learning, and teacher and student efficacy. (Received September 28, 2005)