1046-B1-1913 Helmut Knaust* (hknaust@utep.edu), Department of Mathematical Sciences, UTEP, El Paso, TX 79968-0514, and Emil D. Schwab (eschwab@utep.edu), Department of Mathematical Sciences, UTEP, El Paso, TX 79968-0514. Modular Delivery and Peer-Led Team-Learning for Precalculus. Preliminary report.

The University of Texas at El Paso, located in the largest bi-national community along the US-Mexico border, is the only comprehensive university within reach for a growing population of local college students, the majority of whom are Hispanic. The Department of Mathematics has a long tradition of delivering nearly all of its combined five credit-hour College Algebra/Precalculus and four credit-hour Calculus I sections in a modular format. Building on this we recently joined a college-wide NSF-sponsored initiative to make peer-led team-learning (PLTL) activities a substantial component of all its freshmen-level physical sciences and mathematics courses (Introduction to Chemistry, Introduction to Physics, Precalculus). According to the *Theory of Validation* (L. Rendón) PLTL activities should be an excellent instrument to engage minority students in their learning and further their academic development. Consequently we expect the project to have a significant positive impact on student retention and student success in the early years of undergraduate STEM education. The presentation will introduce in detail the concept, organization and practice of modular course delivery and the accompanying PLTL workshops; we will also present preliminary results of our experiment. (Received September 16, 2008)