Michael B. Scott*, mscott@csumb.edu. *Using Online Homework and Data Mining to Assess Student Learning in Mathematics Courses.

Cal State Monterey Bay uses a web-based homework system to supplement Pre-Calculus, Calculus and other mathematics courses. The infrastructure of the homework system has expanded into a course management system used to coordinate every aspect of the course. Expansion of the system makes possible the collection of rich data streams about individual students. Mining these data enable longitudinal studies of student learning. The presenter will discuss correlations between students interactions with the system and overall course performance. Results of a pilot program incorporating online homework into a classroom setting will also be presented. (Received September 25, 2012)