1067-Z1-2113Rachel B Manspeaker* (rbm001@math.ksu.edu), 126 Cardwell Hall, Manhattan, KS 66502.Using Data-Mining to Classify Student Behaviors. Preliminary report.

Often in a large lecture class like College Algebra, the greatest obstacle to providing personalized, effective education is the anonymity of the students. Data mining provides a method for describing students by making sense of the large amounts of information they generate. Instructors may then take advantage of this expedient analysis to adjust instruction to meet their students' needs. Using exam problem grades, attendance points, and homework scores from the first four weeks of a Studio College Algebra class, we were able to identify five distinct clusters of students: Overachievers, Underachievers, Employees, Rote Memorizers, and Sisyphian Strivers. During this talk we will discuss the methods used to find the clusters, how interviews further characterize the clusters' traits and behaviors, and the steps taken to modify placement and instruction. (Received September 22, 2010)