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and **Ben D Sencindiver**. *Using Analytics to Better Understand Calculus Students' Weaknesses
and Learning Behaviors*.

Calculus 1 has been and continues to be a key gateway course to STEM majors, which contributes to a loss of students in the STEM pipeline. While active learning is well established in the literature as a key component for student success, it is a challenge to consistently maintain such pedagogies at our institution for various reasons. Additionally, student-learning behaviors can mediate the impact of active engagement efforts in class and are particularly important factors in learning outside of class. Therefore, early identification of students whose learning behaviors are setting them up for failure is needed. The focus of our project is to leverage student-learning behaviors as predictors for early identification of students at risk of receiving a grade of D, F, or W in Calculus I. This research is being done by (1) using digital objects (electronic items in the learning management system with which students can interact) and (2) using data to develop an understanding of what learning behaviors students engage in. While we are still developing a model that will predict at-risk students, we will present initial findings on student behaviors with digital objects and how these behaviors (1) correlate with student performance and (2) reflect self-regulated learning behaviors. (Received August 29, 2016)