

1106-VT-2379 **Yuliya Melnikova*** (yuliyamelnikova@gmail.com). *Alignment in Students, Teaching Assistants, and Instructors on the Purpose and Practice of Calculus I Labs*. Preliminary report.

Currently, political and economic demand for students graduating with Science Technology Engineering and Mathematics (STEM) degrees is high, but unfortunately, a large percentage of students switch to non-STEM majors in the first year of study. Roadblock courses, such as Calculus I, can contribute to poor retention rates due to classroom environment and instructor practices. Research suggests recitation sessions (or labs) led by teaching assistants (TAs) can positively impact student retention rates.

This study investigates the role of labs in Calculus I instruction. Through surveys, classroom observations, and TA interviews, the researcher investigated how the lab portion of a Calculus I course is viewed by its participants (which include the instructor, the TA, and students) and how those views align between the participants and the practices in the lab. Furthermore, the study explored how the alignment or misalignment of views and practices affect student opinions of STEM study. Preliminary findings on the alignment of participant views and classroom practices will be presented, and implications for increasing student retention rates will be discussed. (Received September 16, 2014)