

1116-AB-1101 **Chris L Rasmussen*** (chris.rasmussen@sdsu.edu). *Advances in inquiry-oriented instruction at the post-secondary level: Student success and instructor practices.*

In the past decade there has been a considerable growth in research examining college mathematics instruction. This presentation will provide an overview of this research based on a review of over 40 articles published since 2004. Specific findings about the nature and role of lecture-oriented instruction and inquiry-oriented instruction will be presented. For example, an international study of the genre of lecture-oriented instruction in 33 undergraduate classes at 10 universities across six different countries revealed a striking and remarkable similarity in the way in which writing out a mathematical narrative on the board while talking aloud is the same across diverse linguistic and cultural backgrounds. Other studies have examined the nature of inquiry-oriented instruction, which refers to classrooms in which students are actively engaged in doing mathematics and the instructor listens to student ideas, responds to student thinking, and uses student ideas to advance the mathematics. One of the consistent findings is that inquiry-oriented instruction leads to improved student success in comparison to lecture-oriented instruction. Such findings come from small-scale studies of single courses and from meta-analyses of multiple studies. (Received September 17, 2015)