

1145-H1-1174 **Beste Gucler*** (bgucler@umassd.edu), University of Massachusetts Dartmouth, 285 Old Westport Rd (LARTS 396C), North Dartmouth, MA 02747. *A discursive approach to teaching introductory calculus to foster students' mathematical communication and assessment of conceptual understanding in university mathematics.*

This session will be based on issues around formative and summative assessment as well as assessments that promote student communication and conceptual understanding in relation to the MAA Instructional Practices (IP) guidelines on assessment. I will present a completed research report on a teaching experiment I designed that used a communicational (discursive) approach to teaching introductory calculus to foster student learning and mathematical communication in university mathematics education. I will talk about the features shaping the design of the course and how the design supported the assessment of student communication and conceptual understanding of calculus concepts through summative assessments as well as formative assessment strategies incorporated into every classroom session. I will share those strategies with the audience and bring sample tasks I developed and used during the study to engage mathematics educators and researchers in an active discussion about the affordances of using such tasks and strategies for the assessment of students' mathematical communication and conceptual understanding of fundamental calculus ideas. (Received September 19, 2018)