

1135-B5-2450      **Jim Fowler\*** (fowler@math.osu.edu) and **Bart Snapp** (snapp.14@osu.edu). *The Calculus Knowledge Assessment: an open-source instrument for measuring learning gains in calculus courses.*

The Calculus Knowledge Assessment (CKA) is a large bank of openly licensed multiple-choice calculus items created at Ohio State. There are now over 600,000 student responses to questions from the CKA bank and for most of these learners, there is matched face-to-face classroom data as part of an IRB-approved study. This talk presents data on how the CKA can be used to measure learning gains (e.g., in August 2016, a student submitted on average 35 correct answers during the pretest while at the end of the course, a student submitted on average 47 correct answers) and how certain CKA items are highly correlated with success on traditional in-class exams. The fact that the CKA is openly licensed and served via the open-source Ximera platform makes it easy for other schools to adopt the CKA. (Received September 26, 2017)