Joel Kilty* (joel.kilty@centre.edu), 600 W. Walnut Street, Centre College, Danville, KY 40422, and Alex M McAllister, Alison Marr and John Ross. A Re-Envisioning of the Calculus Sequence for the Modern Student. Preliminary report.

The mathematics faculty of Centre College and Southwestern University collaboratively engaged in a thoughtful re-envisioning of the calculus sequence for the modern student. Our goals were incorporating more modeling and “real-life” applications, including “new” ideas in each course for students who studied calculus in high school, incrementally increasing the challenge from one course to the next, and encouraging persistence. Toward achieving these goals, we identified new topics, alternative themes for grouping and sequencing familiar topics, and different approaches to scaffolding complexity. In this talk, we discuss this re-envisioned calculus as an example of a successful curricular reform project, to include: designing the courses, developing the courses independent of current textbooks, making the hard decisions on what context stays and what remains, and winning widespread buy-in from multiple constituencies. (Received September 17, 2019)