Elizabeth Thoren*, ethoren@pepperdine.edu. Leveraging Context to Make Old Ideas New Again.

Most Precalculus and many Calculus students have been exposed to the concepts from those courses in high school, and often come away from the experience with significant holes in their procedural fluency and/or conceptual understanding. This situation leaves educators with a dilemma: How do we re-introduce these concepts to a varied audience that includes the “experienced” as well as the “uninitiated”. One way to address this problem is to leverage context to open problems up and foster deeper conceptual understanding. In this talk I share some carefully crafted mathematical situations that promote inquiry to level the playing field. (Received September 21, 2016)