## 1125-AD-1853 Eric Gaze\* (egaze@bowdoin.edu). Thinking Quantitatively: Teaching and Assessing a Quantitative Reasoning Course.

The text Mathematics and Democracy carefully lays out the rationale for a robust Quantitative Reasoning (QR) curriculum: "Quantitatively literate citizens need to know more than formulas and equations. They need a predisposition to look at the world through mathematical eyes, and to see the benefits (and risks) of thinking quantitatively about commonplace issues, and to approach complex problems with confidence in the value of careful reasoning." This talk will explore how to create assignments for a QR course that address these challenges by providing a firm foundation in proportional reasoning and modeling with spreadsheets embedded in meaningful, real contexts. We will discuss the use of articles and reading assignments alongside worksheets and problem based learning. Activities for group work in class, and strategies for creating assignments that scaffold QR skill development while deepening students' reasoning capabilities will be discussed. To truly empower our students to actively participate in today's data driven society, we must engage them with well thought out QR curriculum and active learning strategies. (Received September 19, 2016)