This talk will present several examples of projects from a Quantitative Reasoning (QR) course. QR by definition is more than just the development of quantitative skills, but involves a disposition to engage quantitative information in a reflective and systematic way to be used in decision making. To develop this habit of mind we need to create assessment items which are “ill-posed” and open ended. These problems will usually not have an exact solution but focus on generating insights which inform decision making and support valid inferences. The projects discussed will involve working with real world datasets, spreadsheets and writing with numbers. Validity issues will be discussed through the use of a traditional QR assessment instrument that has been developed as part of a NSF TUES project. (Received September 13, 2013)