

1014-P1-1543      **Allen Emerson\*** (aemerson@sjfc.edu), 3690 East Ave, Rochester, NY 14618, and **Kris Green**, 3690 East Ave, Rochester, NY 14618. *How a writing assignment changed our understanding of quantitative literacy*. Preliminary report.

Our approach to QL is through the qualitative side — through writing. QL is more than number crunching; it is being able to see the quantitative in the hum and buzz of the problem situation. A problem with most approaches to mathematics is that students are given the problem, rather than their defining the problem for themselves. By giving the student a problem to solve, you have almost obviated the student's motivation for solving it. We believe there is a neglected aspect of QL that goes beyond "numeracy". We have discovered that it also involves being able to quantify the world; that is, to extract relevant information from the problem context in order to shape and define an ill-defined situation. We arrived at our understanding of QL as a result of a new mathematics course we developed for business management students. A few minutes from the start of the first class, we still had no idea what to assign for the students to do and hurriedly settled on an apparently simple, one-page case study we took from a very fine MBA textbook on data analysis. Years later, we find that the course is based almost solely on such argumentation and analysis assignments, which have given us insight into student approaches to problem solving and have led us to a completely new system of grading. (Received September 28, 2005)