David L. Ferguson* (David.Ferguson@stonybrook.edu), Department of Technology and Society, College of Engineering and Applied Sciences, Stony Brook University, Stony Brook, NY 11794-3760. Mathematical and Statistical Reasoning in Compelling Contexts.

Many students with interests outside of "quantitative fields" perceive much of school and college mathematics as dull, difficult, scary and totally irrelevant. For these students, mathematics is a "necessary evil," or a dreaded game, rather than a subject to be enjoyed and integrated into their personal and professional lives. What, then, are the challenges of bringing mathematical and statistical reasoning into richer contexts so that students with multiple interests, strengths, purposes and worldviews might see the beauty and understand the uses and abuses of quantitative approaches? This presentation will focus on the use of modeling and decision making in enhancing students' abilities to do quantitative reasoning. (Received September 15, 2008)