

1056-J1-2040 **Mairead K Greene*** (mairead.greene@rockhurst.edu). *The Mystical Math Room*.

Every fall semester, the students in Math in the Modern World at Rockhurst University experience the power that comes with discovering knowledge in a student-centered, active-learning classroom and then having the opportunity to share that knowledge with the public. The course focuses on providing students with mathematics that is relevant to their lives and exposes them to ideas that they have not previously encountered. Topics discussed in class include microfinance, fairness of voting systems and the role of geometry in modeling our world. Fifty percent of the grade in this course comes from a semester long project in which each student chooses a mathematical topic or question of interest to them and independently investigates this topic. The project is assessed through a detailed report of their investigation and conclusions, a presentation of their work to the class, and the development and presentation of an interactive experience in their area of study for visitors to the Mystical Math Room. In this presentation I will provide examples of past Mystical Math Room projects, discuss the impact of this experience on the students and share my current methods of assessing their learning. (Received September 22, 2009)