Victor I Piercey* (piercev1@ferris.edu), Ferris State University, Department of Mathematics, 820 Campus Drive, ASC 2021, Big Rapids, MI 49307, and Andrew Peterson. Using Games to Teach Freshmen to Handle Mathematical and Professional Complications. Preliminary report.

Many mathematical problems that working professionals face are inherently complicated. Freshmen in general education courses find these complications challenging. Can games be used to teach students how to handle complications in their mathematical and professional work? Many games are complicated, but often the players’ internal motivation sustains them through the learning curve. We introduced a module into a quantitative reasoning course for business students in which the learners played unfamiliar and complicated board games and reflected on their learning process. They were then tasked with applying what they learned to complete an IRS 1040 tax return. This is a complicated task that requires more external than internal motivation, especially in a classroom setting. We use student work and classroom observations to assess the extent to which lessons learned from reflecting on the games transferred to the tax return assignment. We will conclude with plans for future studies regarding this module. (Received August 28, 2015)