1067-C1-357 **Michael D Smith*** (msmith5@hollins.edu), PO Box 9516, Roanoke, VA 24020. *Sharks, Minnows and Wheelbarrows: Calculus Modeling Projects.*

The purpose of this talk is to present two very active applied modeling projects that were successfully implemented in a first semester calculus course at Hollins University. The first project uses a logistic equation to model the spread of a new disease such as swine flu. The second project is a human take on the popular article "Do Dogs Know Calculus," written by Tim Pennings. These projects take interactivity to new levels in math courses by actually requiring the students to engage in physical activity to generate the facts that they will analyze using calculus, while also presenting students with a life lesson to take with them after the course. The benefits that students get from these projects far outweigh the loss of the small amount of lecture time required to collect the necessary data. In addition to discussing these projects, a major portion of this talk will discuss practical and pedagogical lessons learned from implementing these projects. The paper which corresponds to this talk has been accepted by the refereed journal PRIMUS and is scheduled to appear in 2012. (Received August 26, 2010)