

1086-VQ-1715 **Brian Drake*** (drakebr@gvsu.edu), Mathematics Department, MAK A-2-178, Grand Valley State University, Allendale, MI 49401, and **Feryal Alayont**. *Modeling Mathematical Practice in a Discrete Mathematics Course*.

Whether our students will become professional mathematicians or obtain jobs in industry, they will need developed mathematical abilities to be successful in applying mathematical reasoning to their future jobs and lives. Furthermore, as K-12 education implements the Standards for Mathematical Practice of Common Core State Standards, our future teacher students will be expected to develop these mathematical abilities in their own students. In this talk, we will describe the strategies we used in a discrete mathematics course to further our students' mathematical abilities. We structured the course to engage students in the process of mathematical inquiry while encouraging discourse on the main mathematical ideas of the course. Students were regularly engaged in inquiry-based activities with individual exploration and group discussion components. Additionally, students participated in a long-term research project involving them in collaborative research. (Received September 24, 2012)