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**Charlene Morrow\*** (cmorrow@mtholyoke.edu). *Mathematical Habits of Mind (MHoM) Are Not Just for Math Class: Using Mathematical Ways of Thinking Outside the Mathematics Classroom to Create Artwork.*

Goldenberg, Cuoco, and Mark, in 1996, claimed that MHoM could be an organizing principle for high school curricula to help close the gap between what the users and makers of mathematics do and what they say. They state that high school mathematics should help students: 1) become comfortable with fuzzy problems; 2) see the benefit of systematizing and abstraction; 3) develop ways of describing situations; and 4) develop genuinely mathematical ways of thinking. There are also many problems in realms not usually defined as mathematical in which MHoM can spur creativity. We often talk about ways that mathematics can help solve a number of practical life problems, but most people never give mathematics a thought when working in more creative/artistic realms. We can measure the size opening for a mat once we have finished a painting, but what about bringing mathematics into the picture when creating a painting? If mathematical thinking is truly habitual, i.e., part of our skill set, then MHoM can contribute to our approach to any problem in any area. I will argue that students are more willing to develop MHoM if they believe that these habits will be useful outside of the mathematics classroom. I will also describe how I used mathematical thinking to create a series of artworks. (Received September 23, 2012)