Martha Ellen Waggoner* (murphy.waggoner@simpson.edu), 701 N C Street, Indianola, IA 50125. Using Doodles to Teach the Math of Art.

Simpson’s Math of Art class satisfies both the Quantitative Reasoning and the Arts requirements in our general education. The Arts designation for the course requires the students to participate in and reflect on the creation of art. The course attracts students who lack confidence in their ability to create art and who have a narrow idea of what mathematics is.

Using the philosophy of Rick Roberts and Maria Thomas (Zentangles) that “anything is possible one stroke at a time,” I use simple doodle-like drawing in class to convince students that they can produce art. At the same time they learn the fundamentals of symmetry, perspective, fractals and other mathematical concepts in art, concepts that stretch their view of mathematics.

I will demonstrate a couple of doodling techniques and the mathematics associated with them, show work that students have produced and provide a link for resources. (Received September 17, 2013)