J. White\* (jacci.white@saintleo.edu). Fractals, writing, and applications of Geometry. Preliminary report.

Art inspires many mathematicians, just as mathematics can inspire artists. Assignments that combine art and mathematics can help a student show their strengths in order to build confidence in mathematics which they often see as a weakness. An early exploration of fractals can appeal to many students through digital computer software that lets them explore ways that changes in the mathematics changes the artistic appeal of the result. Writing is seen by many as an art, but can also be used to express artistic ideas. Students can begin to see the useful nature of mathematics when they write about the similarities between geometry and architecture, or explore the mathematics behind a piece of art. A field trip to a museum to reflect upon how mathematics is used by some artists can strike a spark of interest in a student who was previously bored with the mathematics. Examples from these activities and more will be shared in this session. (Received September 13, 2015)