Julia R Sykora* (julia.sykora729@gmail.com) and Allison K Young. 3D Mathematical Models For the Blind.

Teaching mathematics to students with visual impairments provides numerous challenges. Many times, low-tech solutions can be found: pipe cleaners, puff paint, and rubber bands can all be excellent teaching aids. However, when students arrive in upper-level math classes it can be more difficult to illustrate these more complex concepts. Solids of revolution, typically taught in Calculus II classes, is a concept that provides many challenges to blind students. With the rise of 3D printing and 3D pens, it is becoming easier to make mathematical ideas more physically accessible to blind students. In this talk, we will explore the development of our ideas, the resulting 3D models, and a lesson plan to teach this topic in a way that both blind and sighted students can more easily understand. (Received September 19, 2016)