Short Description

Tactile 3-D Demonstrations via Cube and MakerBot

Difficulties inherent in representing 3-D objects on 2-D media can present barriers to student understanding. 3-D printers are becoming more commonplace and can generate a wide variety of objects. The authors will show how tactile 3-D objects can enhance mathematical experiences in Calculus and provide some helpful tips for 3-D printing.

Tactile 3-D Demonstrations via Cube and MakerBot

James P. Braselton, III
Georgia Southern University
jbraselton@georgiasouthern.edu

Lila F. Roberts
Clayton State University
LilaRoberts@clayton.edu

Jarrett Terry
Clayton State University
JarrettTerry@clayton.edu

Difficulties inherent in representing 3-D objects on 2-D media can present barriers to student understanding of mathematical concepts as they relate to solids. All students, but particularly those who have visual impairments, can benefit from a tactile representation of mathematical objects.

Because 3-D printers are becoming more commonplace and can generate a wide variety of objects, the ability to create real hands-on objects is no longer out of the question. The authors will show how tactile 3-D objects can enhance mathematical experiences in Calculus and provide some helpful tips for good quality 3-D printing on Cube and MakerBot Replicator 2.