The Discovery Dome: A Tool for Increasing Student Engagement

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The Discovery Dome is a portable full-dome theater that plays professionally-created science films. Developed by the Houston Museum of Natural Science and Rice University, this inflatable planetarium offers a state-of-the-art visual learning experience that can address many different fields of science for any grade level. It surrounds students with roaring dinosaurs, fascinating planets, and explosive storms – all immersive, engaging, and realistic. Dickinson State University has chosen to utilize its Discovery Dome to address Earth Science education at two levels.

University courses across the science disciplines can use the Discovery Dome as part of their curriculum. The digital shows immerse the students in various topics ranging from astronomy to geology to weather and climate. The dome has proven to be a valuable tool for introducing new material to students as well as for reinforcing concepts previously covered in lectures or laboratory settings.

The Discovery Dome also serves as an amazing science public-outreach tool. University students are trained to run the dome, and they travel with it to schools and libraries around the region. During the 2013-14 school year, our Discovery Dome visited over 30 locations. Many of the schools visited are in rural settings which offer students few opportunities to experience state-of-the-art science technology. The school kids are extremely excited when the Discovery Dome visits their community, and they will talk about the experience for many weeks.

Traveling with the dome is also very valuable for the university students who get involved in the program. They become very familiar with the science content, and they gain experience working with teachers as well as the general public. They get to share their love of science, and they get to help inspire a new generation of scientists.