

STEM EDUCATION EFFORTS IN THE ARES PROJECTS

**Rajiv Doreswamy, Ph.D., Deputy
Manager, Ares Program Planning and
Control**

Ares Projects, NASA Marshall Space Flight
Center

Rajiv.Doreswamy@nasa.gov

**Robert Armstrong
Ares Outreach Lead**

Ares Projects, NASA Marshall Space Flight
Center

Bob.Armstrong@nasa.gov

ABSTRACT

According to the National Science Foundation, of the more than 4 million first university degrees awarded in science and engineering in 2006, students in China earned about 21%, those in the European Union earned about 19%, and those in the United States earned about 11%. Statistics like these are of great interest to NASA's Ares Projects, which are responsible for building the rockets for the U.S. Constellation Program to send humans beyond low-Earth orbit. Science, technology, engineering, and mathematics students are essential for the long-term sustainability of any space program. Since the Projects' creation, the Ares Outreach Team has used a variety of STEM-related media, methods, and materials to engage students, educators, and the general public in Constellation's mission. Like Project Apollo, the nation's exploration destinations and the vehicles used to get there can inspire students to learn more about STEM. Ares has been particularly active in public outreach to schools in Northern Alabama; on the Internet via outreach and grade-specific educational materials; and in more informal social media settings such as YouTube and Facebook. These combined efforts remain integral to America's space program, regardless of its future direction.

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