



FLATE Summer Robotics Camp
A Hands-on Experience in Science, Engineering, Technology & Mathematics

FLATE orchestrated and participated in a number of student outreach events throughout the summer. At HCC, FLATE sponsored a weeklong, robotics-based camp from July 14-18. The camp was part of FLATE's ongoing effort to teach students how science, technology, engineering, and mathematics (STEM) is integral to every aspect of their lives and about the exciting, rewarding, and lucrative careers in modern manufacturing and technology operations.

Participants included students from Dowdell Middle Magnet School and other Hillsborough County middle schools. Allan Dyer, who helped recruit students and taught at the workshop, said summer camps are a great way to reach out to students. He added, "The hands-on stuff, when they are building and programming, is what gets kids excited."

During the camp, students reconfigured Lego® Mindstorms® robots, programmed them to operate utilizing light and sound sensors, and competed in daily challenges. The exercises required team work, accuracy, and speed. Students also witnessed a live demonstration of an under-water ROV (remotely operated vehicle) and learned about its design and operations. Matt Samide, a sixth grader, said he likes programming robots because of the challenges it involves.

Students also toured the Center for Rehabilitation Engineering and Technology lab at the University of South Florida. Here, they test-rode a newly designed robotic wheel chair steered by body movements and witnessed applications of robotics technology in providing solutions for the physically handicapped.

FLATE also supported the Composite Materials camps at Tallahassee and Brevard Community Colleges, and the Tech Stars Engineering for Youth summer camp at Manatee Community College. All of these camps facilitated active learning and aimed at educating middle school students about the basic principles of mathematics, physics, manufacturing processes, automation, and engineering.

FLATE is a National Science Foundation center committed to ensuring that Florida has a well prepared workforce. It was established in 2004 and is one of 37 centers in the United States focused on improving science, technology, engineering, and mathematics education to meet the needs of American advanced-technology industries. For more information, visit www.fl-ate.org.

