

YES 2K6: A mentorship program for young engineers and scientists

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The Young Engineers and Scientists 2006 (YES 2K6) Program is a community partnership between Southwest Research Institute (SwRI), and local high schools in San Antonio, Texas (USA). YES has been highly successful during the past 14 years, and YES 2K6 continues this trend. This program provides talented high school juniors and seniors a bridge between classroom instruction and real world, research experiences in physical sciences (including space science and astronomy) and engineering. YES 2K6 consists of two parts: 1) an intensive three-week summer workshop held at SwRI where students experience the research environment first-hand; develop skills and acquire tools for solving scientific problems, attend mini-courses and seminars on electronics, computers and the Internet, careers, science ethics, and other topics; and select individual research projects to be completed during the academic year; and 2) a collegial mentorship where students complete individual research projects under the guidance of their mentors during the academic year and earn honors credit. At the end of the school year, students publicly present and display their work, acknowledging their accomplishments and spreading career awareness to other students and teachers. YES 2K6 developed a website for the Magnetospheric Multiscale Mission (MMS) from the perspective of high school students. Over the past 14 years, all YES graduates have entered college, several have worked for SwRI, and three scientific publications have resulted. Student evaluations indicate the effectiveness of YES on their academic preparation and choice of college majors. We acknowledge funding from the NASA MMS Mission and local charitable foundations.