

Org-Type	Non-Profit-based		
Lead	"Space Days"	PoC	Ivor Dawson, President
PoC-Phone	310.279.2624	PoC-Email	ivor@travelingspacemuseum.org
Address	4658 Don Lorenzo Drive Unit D Los Angeles, Ca, 90008		
URL			
Service-Region	Nationwide		
Type	Student Program		
Subjects	General Science Space		
Level	Elementary School (K-5th grade)		
Other-Objectives	<p>The primary focus of the program is placed on the use of several full-scale simulators that replicates the actions of rockets, rocket planes, aircraft and space station modules. Simulators also replicates space age sub-systems such as the shuttle space toilet. Program-Best-Practice: The Traveling Space Museum's "best practice" use of simulators was inspired by the US Army's use of simulators during World War II. The Army taught young recruits how to fly airplanes while still on terra firma. Former astronauts Gordon Fullerton and Dr. Leroy Chiao who have 'flown' TSM simulators recognized their effectiveness as teaching tools and the fascination that kids would have for them. LMCO's formal evaluation of an early Space Day reported that 10 of 12 teachers gave the full scale simulator presentations their highest rating: 10 out of 10 and an over all score of 9.7 "in providing educational concepts in an innovative, inspiring and exciting manner to students. 95% of the teachers said that TSM's "Space Day" 'exceeded their expectations.' One teacher notices that a usually energetic student was walking slowly during Space Day. The boy elegently reasoned that he if he walks slowly - the day would last longer! Another teacher was stunned to receive her first unsolicited book report! The school librarian noticed a ru on space science books days after Space Day. A fourth teacher was surprised when a student who usually has trouble writing a paragraph, has no problem writing about Space Day! This same teacher heard a Special Ed. student say "that with hard work, I can do anything!" Traveling Space Museum won the The National Space Society's "Best Education Program Award" (with the Orange County Space Society)for "Space Day in Compton Ca. 2001." In 2005, TSM Founder Ivor Dawson received the Shuttleworth Leadership Award for inspiring youth. Presenter Mary Shuttleworth, Founder of The Shuttleworth Academy and Mary's Schoolhouse is the aunt of billionaire space tourist Mark Shuttleworth. One day, in a not-too-distant future, every school will have a language lab, a compuer lab and a TSM space lab module for kids to explore.</p>		
Served-per-Year	15,000	Demographics	
Content	<p>Simply put, TSM brings the space museum to schools. Specializing in the use of full-scale simulators as teaching tools, TSM's many interactive attractions include the only full-motion flight simulator, space laboratory mockup and jet aircraft to visit schools regularly nationwide. Interactivity is key as students are invited to climb in and operate real and very functional hardware. Inside the simulators the students are completely immersed in the experience. The typical museum will not allow students to touch the exhibits much less climb inside them! Students are introduced to lab top computers, computerized microscopes, heart monitors, glove boxes, CB radios and other equipment. Operating the hardware teaches relevancy and that understanding makes the learning process fun! Students liken Space Day to an outing at a theme park. The lessons learned are memorable enough for students to go home and relate their new found knowledge of space to parents, friends and siblings. Space Day makes a school to be the coolest place to be! At elementary schools, homeroom teachers are encouraged to stay with their classes as students rotate to each new exhibit on campus every twenty minutes. TSM volunteers, many of whom are female pilots and retired aerospace personnel, demonstrates the exhibits and answer all the questions. Most museum doesn't always have personel to answer questions. With experts on site, teachers can enjoy the Space Day experience along with their students. A master schedule, given to each homeroom teacher, keeps the entire school in rotation and on time. Every teacher knows exactly where their class is supposed to be at any given time on that day, With five to ten minutes to travel to the next attraction, a typical class should see two to three exhibits an hour. Factoring in lunch and exercise breaks, the entire student body should have seen ten or more exhibits in a five to six hour day. Each exhibit is explained in a presentation that lasts about twenty minutes. Depending on the size of the student population, one, two or even three classes at a time can tour the same exhibit while the entire school is in motion. The uniqueness of the program and anticipation of the day's events provides much of the excitement and the energy. On a typical Space Day, students are busy operating robots, exploring a space laboratory module, putting on space suits or climbing inside the BD-5J -"the world's smallest jet." How astronauts go to the bathroom is instantly demonstrated when students sit on our space shuttle toilet simulation. Space toys, remote control rovers are also favorite exhibits along with the chance to eat space food or handle a meteorite! Space Day stimulates all the senses. Over the course of a school day several hundred students will have toured many more exhibits then what they would have seen at a typical museum. A Space Day is unique as it is likely to be the only shared experience that includes the entire school population! And just how real are TSM simulators? Just ask Gordon Fullerton, Commander of the 3rd Space Shuttle flight. Fullerton had a ball piloting TSM's Orion CRV flight simulator! He was fascinated just looking at it. He had to cram his long legs into the narrow cockpit of the Orion and commented that "NASA never made any cockpi big either!" He quickly mastered the tricky action of the joystick. ISS Commander and Mission Specialist Dr. Leroy Chiao was the second former astronaut to fight TSM's Orion. He gave the experience "two thumbs up!" TSM also recruits youthful guest speakers to schools who have accomplished amazing feats in science and aviation -often sponsored by TSM. This included Katrina Mumaw, the youngest person to break the sound barrier and Justin Houchin-the youngest to fly a military jet for the National Test Pilot School in Mojave Ca. Kids love to meet amazing kids!</p>		
Outcomes	<p>TSM's "Space Day" program stimulates student inquiry in astronomy, rocketry, manned space flight, meteorology, 'space biology' and other aspects of aerospace education. Students are inspired to become astronauts, scientists, engineers and pilots. Several of TSM's teen proteges are currently taking flying lessons and winning science fair awards. TSM's first protege, a 15 year old named Katrina Mumaw recruited in 1998 graduated the Air Force Academy in 2006. TSM also began its "Students Teaching Students" program at a recent Space Day event at Millikan Middle School in Sherman Oaks, Ca. The school's Advance Placement students (those taking college level science courses)became 'inquiry coaches' demonstrating the exhibits to fellow students. The Science Chair and Administrator deemed STS a big success and a good 'ground school' for aspiring teachers!</p>		
Started	Funded-Through		
Length	Cost		
Primary-Funding	Industry	Primary-\$	
Materials			
Other-Funding			
How-Assessed			
Best-Practice-Why			
Promising-Practice			

Lockheed-Martin Corporation Raytheon's MathMovesU Program, San Fernando Valley 99s, SFV 99s' Aviation Explorers, Long Beach 99s, Experimental Aircraft Association, EAA Young Eagles program, FIRST Robotics, Team 980 ThunderBots Los Angeles Unified School District, AIAA, World Space Foundation, A-MAN International Science & Discovery Center, El Segundo USD, Riverside USD, Manhattan Beach USD, Science & Technology Education Partnership (STEP)-Riverside, Griffith Observatory (LA Dept. Parks & Rec)X-Prize Foundation