

**WALKING ON MARS,
THE VICTORIAN SPACE SCIENCE EDUCATION CENTRE**

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What is it like to take the first step onto an alien planet? So powerful and stimulating is this question that in 1969 the entire earth stopped to witness Neil Armstrong and Buzz Aldrin take the first human steps on the moon. The Victorian Space Science Centre (VSSEC) is a Victorian Government initiative aimed at giving Australian students an opportunity to experience that excitement. The centre opens in 2005, and is equipped with resources for science teachers to take their class on a geological field trip to Mars. The space science technology challenge of the 21st Century is to place a human on Mars and bring that person back safely to earth.

The Mars Surface Laboratory is a key attraction feature included in the Centre. The laboratory consists of a Mission Preparation Room where students plan their science mission and become familiar with the experiments they are to conduct on the planet's surface. Donning protective clothing they pass through the airlock into the Planetary Surface Laboratory and onto the surface of the new planet. Their steps are directed and monitored by students in the mission control room linked to the surface laboratory. Here they collect soil samples, rocks, ice core samples or measure radiation levels. Accompanied by a teacher trained in geology they can examine the construction of this strange planet. Returning to the Mission Preparation Room the students can examine the soil samples for water, test for magnetic particles or determine the specific heat of the frozen core.

The program was designed to provide a richness and depth of experience not possible in school. The students are placed in an environment that allows them to enhance their decision-making skills, teamwork, leadership and problem-solving abilities and the students will walk on a simulated planet surface and conduct experiments whilst linked to a student directed Mission Control Centre and conduct scientific research in a simulated space station environment.

The Victorian Space Science Education Centre (VSSEC) aims to promote the learning of science. It seeks to improve student learning by providing exciting and engaging educational activities and programs. It also aims to improve the teaching of science through the continuous professional development of teachers. The VSSEC opens on 13th September 2005 and is available for use by schools, Universities and research organisations such as the Mars Society of Australia.

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