

Skylab is a school that was designed to educate the formerly homeless at an ex-military base near California State University Sacramento (CSUS) that has been converted to project homes. Skylab is a youth production studio where students can get help on homework, obtain one-on-one mentoring/tutoring and be involved in special projects. The goal is to teach them what they need to know to be able to function in society as well as try to raise interest and confidence to attend college. As recipients of the Marsh W. White award, the CSUS chapter of the Society of Physics Students (SPS) has played an active role in bringing the excitement of physics into the hearts and minds of the children.

The CSUS chapter of SPS has engaged these students in various demonstrations and activities encouraging the importance and excitement of learning physics. Every Friday, a small group of SPS students (2-4) travel to the Skylab and administer various contests and demonstrations that have proven to drive excitement and curiosity of physics.

In the short time that the CSUS chapter of SPS has been involved with the Skylab, there has been a liquid nitrogen experiment day (including liquid nitrogen ice cream), a rocket building/launching contest, and an airplane building and flying contest. The success of "Physics Friday" can be seen from the large increase of students that now look forward to coming home from school and engaging in exciting physics experiments each Friday. At the end of the day, the children are always asking what to expect next week and why we can not stay longer. Some common quotes are, "Whoa! How'd you do that!" and, "Can I try it next?!"

The directors of the Skylab continue to be very enthusiastic about what have been doing for the kids. We have agreed to come back next school year and continue our efforts. A large list of experiments and demonstrations has been created to keep us busy over the next year. One such experiment is a solar lab where we will bring telescopes to the Skylab and look at the sun.

The children will be given drawings of the sun and crayons so that they may draw the sunspots and the different layers of the sun.

Also, a small booklet has been created that contains various “at home” physics experiments. This is currently under production and will soon be distributed to the children in order to bring physics to their homes and to the Skylab on other days of the week. It is our hope that this booklet may be distributed at all of our outreach events and possibly taken to local elementary schools.

The Sacramento chapter of SPS has decided to play an active role in promoting the 2005 world year of physics. As students that have chosen a path of knowledge and education, the chapter feels that it is the duty of the club to reach out to those that are less fortunate and teach them about the joys of physics and learning about how the world works. The Skylab is one such example of how we have been achieving this goal.

Another example of the CSUS chapter of SPS reaching out to the community is the volunteer work that is done each year for the Science Olympiad held at CSUS. SPS members have helped judge contests and aid in the organization of this day-long event. There were 12 high schools and 20 middle schools totaling approximately 300+ kids. About 10 SPS members assisted this fun and educational day.

As can be seen from the pictures enclosed with this application, the kids have learned to smile and enjoy physics. It is our goal to utilize the children’s open and eager minds to show them that science can be not only fun, but a rewarding knowledgeable experience as well. It is for this reason that the CSUS chapter of SPS has put in over 100 man-hours of community service during the current semester alone.