

## **AB 1330 Research Study**

### ***The Effects of Outdoor Education Programs for Children in California***

The American Institutes for Research (AIR) conducted an evaluation to measure the impacts of week-long residential outdoor education programs for at-risk sixth graders in California as called for by California Assembly Bill (AB) 1330, Chapter 663.

This study focused on 255 sixth-grade students from four elementary schools who attended three outdoor education programs (Tulare County, Los Angeles County, and San Diego County) between September and November of 2004. Highlights of the findings of the study are listed:

- ✓ Children who attended outdoor school significantly raised their science scores by 27 percent as measured by a pre- and post survey administered upon their return to school
- ✓ The increase in science knowledge was maintained six to ten weeks following program participation.
- ✓ Six to ten weeks after the experience at the outdoor school, children who attended the program showed gains in cooperation and conflict resolution that were significantly higher than the control group.
- ✓ According to teacher ratings of each student, those children who attended outdoor science school showed statistically significantly positive gains on all eight constructs on which they were rated. In contrast, the control group showed losses on seven of the eight constructs. These gains were observed in self-esteem, conflict resolution, relationship with peers, problem solving, motivation to learn, and behavior in class.
- ✓ According to parent reports, students who participated in the program had significantly larger gains in environmental behaviors, compared to children who did not attend the program.
- ✓ 58 percent of the students studied were identified by teachers as English Learner (EL) students. According to teacher reports, among those students who attended the program, EL students demonstrated gains in cooperation, leadership, relationship with peers, and motivation to learn that were significantly larger than the gains shown by non-EL students for those constructs.
- ✓ 56 percent of the treatment group reported that the outdoor school represented the first time they had spent time in a natural setting.

Complete study is available through the California Department of Education (CDE) Environmental Education Program by calling 916-322-9503.