

Evaluation of California's environmental science education curriculum

Jane Kim

Abstract Presently there is a dearth of information about High School level environmental science education. Exactly what topics should be covered in an environmental science class is disputed. Current California schools use a curriculum designed with the singular goal of conditioning students to pass the Advanced Placement exam. To date, few studies have quantitatively measured how students interact with the current AP environmental science education system. Using standardized tests, this study attempts to quantitatively measure how well students learn environmental science topics. Participants in this study completed a demographical questionnaire which asked questions about study habits and primary language. Students also took the Children's Environmental Awareness and Knowledge Scale Exam once in the fall as well as once in the spring. The AP students also took tests modeled after the multiple choice portion of the AP exam. This study's guiding hypotheses were that performance is a strong function of primary language, and that class size and time spent studying are of secondary importance. The study found that performance was, contrary to the hypothesis, not a function of primary language. The study also found that students in larger classes performed better. To obtain better results this study should be repeated such that a student's questionnaire is associated with his or her exams. Particularly, future studies should carefully examine the relationship between scholastic performance and other factors such as race and economic status. These studies may lead to positive changes in California's environmental science curriculum.