

Student Attitudes in Earth Science Survey (SAESS)

Introduction

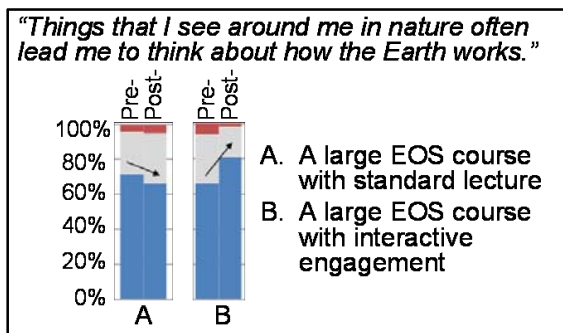
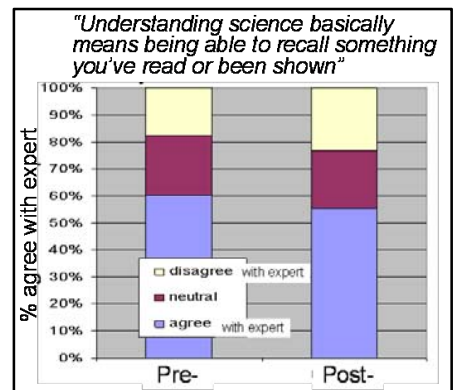
- Student attitudes toward science can be a better predictor of performance in exams than the number of previous science classes
- We measured student attitudes towards Earth and Ocean Sciences to assess changes in attitude following courses
- Students responded to 35 statements using a 5-point disagree to agree likert scale both at the beginning and end of the semester

Objectives of SAESS

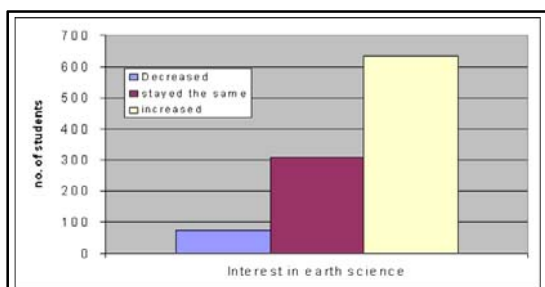
- Determine whether students approach Earth and Ocean Sciences the same way that scientists do
- Establish students' beliefs about the nature and relevance of Earth and Ocean Science
- Reveal the effects of course innovations on student attitudes and interest

What do our data show so far?

The good news is that, on average, students enter our classes with positive attitudes toward Earth & Ocean Sciences. However, their attitudes don't necessarily change for the better. For example, the composite data from 11 EOS courses suggest that about 20% of our students think science is about recall, and the % is worse by the end of the term.



Student answers to this survey can also highlight differences among our courses, which can be one piece of information used to guide pedagogical choices. For example, if we compare the student pre-post responses from two large EOS courses, one with traditional lecture format and one that incorporates interactive engagement, the data suggest a positive shift toward the "expert" response (to this particular statement) only in the class that has incorporated interactive engagement.



Overall

On the good news side, most students report that their interest in Earth Science increased over the term. Good to know!

