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In the fall of 2000, Tom Hickson and I inherited a 2 faculty geology dept with 4 majors, no student or professor research, no field requirement, very little standard lab equipment for upper-division co and a curriculum based on the offering of the same large (124 students) but popular, intro physical course every semester with a major that consisted of 6 required allied courses and 7 required geology courses with no choices and with few field-based labs. It had been a 2 faculty/1 adjunct department for 30 years where only 1 faculty member had a Phd. and neither were expected to do research. The department had a strong tradition of helping students individually and had recently moved into a new building with wonderful classrooms.

Tom and I were hired at the same time and expected to:

• assess, overhaul and update the curriculum  
• improve and maintain an excellent teaching record  
• introduce and maintain an undergraduate research program  
• grow the number of majors

In the first 4 years and with the help of great adjuncts, we:

• continued to serve students as individuals, meaning we worked very long hours which allowed us to be available to meet often with students one-on-one  
• added new focused-topic introductory courses designed to address varying student interests and recapture the curiosity of those turned off by science, following the advice of Barb Tewksbury and the Hamilton curriculum.
  o each prof teaches a course that they are most interested in but each one contains the same basic core geology material so that the course can fulfill a lab requirement but also serve as an entrée into the major  
  o we designed the courses to include many in-class, active learning components to improve the pedagogy  
  o we designed all new labs for each course, including a few outdoor labs that take advantage of nearby outcrops
• overhauled the major curriculum by attending a national PKAL workshop, gathering information on other geoscience departments, adding and developing new courses, giving students choices
  o at the same time, worked with the Dept of Teacher Ed. to redo the Earth and Space Science co-major  
• with the help and support of administration, purchased new lab and research equipment for introductory and upper-division labs  
• added research programs which intimately involve undergraduates, took undergrads to national conferences, published with them  
• implemented field experiences in all courses, ranging from 1 afternoon to several days in length
  o many of these serve as the data collection phase for multi-week and semester-long projects within upper-division courses
• we emphasize liberal arts skills and preparation for any career first, geology content second.
• we supported resurrection of the geology club and participated in many weekend service trips to Will Steger’s environmental conference center
• introduced students to different career paths via a speaker series What Do Geologists Do?
• hired a third person who is energetic, motivated and committed to working with undergraduates and who’s field (paleoclimate, paleoceanography) helps us move in a more environmental direction in both course offerings and student research

We now have 18-20 majors and have doubled to quadrupled enrollments in most of our upper-division courses. We got permission to hire a 5-year limited term but full-time person (and our dean fought hard for it to be a tenure track position).

What we believe has worked and led to our increase in majors:
  • enthusiasm, enthusiasm, enthusiasm
  • caring about students as people, caring about their success whether or not they pursue a traditional geology career
  • field-based labs (better learning, better building of comraderie)
  • flexibility in the major; increasing our environmental focus; changing some traditional courses to focus on better student learning and improved core skills