SAFETY IN NUMBERS

Dallas D. Rhodes

In the hierarchy of academic disciplines, most geology programs are grouped with others such as geography, classics, music, and LOTS (Languages Other Than Spanish) that have uncertain futures. Understanding and accepting this fact has played a key role in everything the Department of Geology and Geography (DoGG) at Georgia Southern University has accomplished over the past seven years. The Department's faculty understands that the program's future depends on the perception of its "value" to the University. "Value" in this usage can have many meanings. An essential first step was determining what the institution valued most.

Between Fall 1998 and Fall 2004, Georgia Southern University's undergraduate enrollment increased from 12,386 to 14,092. At the same time that enrollment was growing by 14%, the State's allocation for the University System of Georgia (USG) decreased by nearly 25%. Providing the core courses became one of the greatest challenges for the University and was the area in which the DoGG was able to contribute immediately.

The Fall 1998 semester also marked the shift from a quarter system to a semester calendar for the USG. With the change in academic calendars, Georgia Southern was compelled to revise the core curriculum. The new core requires three courses in the sciences (Area D1, a traditional laboratory science course, Area D2, a discipline-based environmental course with lab, and Area D3, an enrichment course). No more than two of the courses can be in the same discipline. During the first two years of the curriculum, the DoGG shifted resources to the area of greatest demand, i.e. Environmental Geology lecture and laboratory (Area D2). Additional sections of the environmental course were added at the expense of the traditional physical geology course offered in Area D1 (where students showed a clear preference for the general biology course). The adjustments ended when all sections of both physical and environmental geology consistently filled.

Tailoring course offerings to the demand for core classes (in geography as well as geology) helped the Department's annual student credit hour production grow from 5,372 in Fall 1998 to more than 10,000 during the current academic year. Furthermore, most of the increase came from greater faculty productivity. During the 1998-99 academic year, the DoGG ranked 13th out of 32 departments with a productivity index of 231 Student Credit Hours (SCH)/Full Time Equivalent Faculty (FTEF)/Semester. By 2003-2004, the DoGG was the second most productive department in the University with 427 SCH/FTEF/Semester, an increase of almost 85%.

At the same time enrollments were increasing, the DoGG undertook a number of initiatives to enhance the quality of the core courses. Important among these were $2.5 million in renovations to the building that housed both chemistry and geology and geography funded by NSF, the State, and University. An NSF grant provided funds for a well field and monitoring equipment. In-house laboratory manuals, emphasizing local issues and using the resources available in the Department were produced and instrumentation for the analysis of liquid and solid earth materials was obtained. A field trip to the Georgia coast was made available at no cost to all students in introductory level courses.

The number of students graduating from academic programs is another important measure of "value" at Georgia Southern. In Fall 1998, the DoGG had been placed on the list of programs to be monitored by the Board of Regents due to the small number of recent graduates. With only 23 majors at the time, the need to "grow" the program was obvious to everyone. Adding the first geography degree in the Department and initiating the GIS program helped to increase the number of majors slightly. The real change began when the DoGG found a model for the success we hoped to achieve.

The Department of Geology and Geography at Northwest Missouri State University (NWMSU), on a campus with fewer than half as many students as Georgia Southern, has over 300 majors. The DoGG invited a senior member of the faculty from NWMSU to consult on increasing the number of majors. In many ways the two departments' activities were similar with the major exception that NWMSU actively recruits new geology and geography majors from all introductory level courses. Active recruiting and the success of their GIS program allows NWMSU to be among the largest undergraduate geography programs in the country.

In Spring 2001, the DoGG began actively recruiting majors and set a goal of having 1% of the undergraduates at Georgia Southern as geology or geography majors. Soon after recruitment started the number of majors in the program began to increase and that upturn has continued through the present. Last December (2004), the number of majors topped 100 (almost evenly split between geography and geology) for the first time in the history of the Department. The goal of 160 majors seems much closer to reality.

Other activities during the period contributed to the Department's success. Adding a Bachelor of Arts degree in geography was particularly important to continued growth of that program. Far ranging field trips for majors have added greatly to our students' breadth of experience. Social events, including an annual awards dinner and gatherings for alumni and current students during homecoming, have helped the students to feel a part of the Department. Undergraduate research experiences increased in quality and students began to present their work at professional meetings at all levels. All of these activities have helped to give majors a stronger attachment to the Department and have made them better recruiters of other motivated students.

The Department's success in providing positive visibility for the University is also valued. The DoGG had a history of initiatives that included the founding of the Georgia Southern Museum, the excavation of the Vogtle whale (which has proven to be the oldest fossil whale in North America), and grants for teacher training including the St. Catherines Island Sea Turtle Conservation Program. The Department's faculty has received multiple University Awards for Excellence in instruction, research, and service. They have leadership roles on campus and are active participants in the community and the profession. As hosts of the Southeastern Sectional Meeting of the Geological Society of America in Savannah in 2007, the Department will have its "debut" as a program that has transformed itself from a follower to a regional leader.

The Department is stronger by having geology and geography together. Two small departments would have great difficulty achieving all that has been accomplished by our larger, integrated programs. Geographers and geologists share courses, equipment, and facilities, and they enjoy a

breadth of learning not generally found in small single-discipline departments. Most important of all, the faculty share an understanding of what it means for the Department to be valued by the University.