

Academic Program Review of the Department of Geological Sciences: Departmental Response to the Dean's Recommendation

The most important thing we are telling all academic units is that program review is not a punitive process. Faculty, departments, and programs are definitely not being targeted for elimination...This is an opportunity for programs to present themselves in an honest and positive way...Program review is not strategic planning.

*--- from "Perspective on program review" issued by the Office of VPAA and
Provost, Bradley University ---*

We note in the Dean's response that "these recommendations must be taken within the context of Bradley University's existing program initiatives and its commitment to make strategic choices about its curricular offerings" (p.1). We feel that the approach in this statement may be altering the Academic Program Review (APR) process from its original intent as spelled out in VPAA Perspectives on Program Review turning it into a strategic planning process. We were puzzled to discover that the idea to eliminate our department was circulating among at least some college faculty before the APRC review came out. A student last spring was told by a faculty not to become a GES major because the department was being eliminated.

We agree with the opening paragraph of the Dean's response to the Academic Program Review of the Department of Geological Sciences. However, we would like to reiterate the strengths of the GES Department which were innumeral in the APRC review.

1. The significant number of high quality graduates over the last 35 years.
2. The high quality of high school science teachers produced over at least the last 15 years and Geological Sciences importance to the Bradley Teacher Education.
3. The strong faculty-alumni relationships.
4. The excellent placement of graduates in post-graduate and professional programs.
5. The success of the department in fulfilling its mission over the last 35 years.
6. The great energy devoted to teaching. This agrees with a recent Sociology Department study which indicated that Geological Sciences had the highest student semester/faculty ratio among the sciences and the third highest of all departments in its college. This also indicates the strong commitment this department has made towards General Education.
7. The excellent training of its staff.

We would like to strongly point out that the Academic Program Review Committee did not conclude that the Department of Geological Science should be eliminated. In fact, it recommended it be maintained and, ideally expanded!

We wish to supply herewith additional information and explanation; and to take exception to various points raised by the Dean.

A point raised by the Dean is the low number of majors currently in the Department. Cyclic major numbers are a national phenomenon in geology departments aggravated by a variety of external factors. We are glad that the Dean noted that our major numbers are comparable to those of other geology departments. To quote the APR report,

"Geological sciences faculty members at Bradleyhave produced a significant number of graduates, a number of whom have gone on to graduate studies in geosciences." (p.2)

We agree with the majority of enrollment figures given for classes offered every semester. However, we strongly disagree with the figures for the classes we offer only once a year or every two years or even less frequently. This includes GES 111, 201, 202, 300, 302, 305, 311, 312, 321, 335, 407, 421, 493, and 494. Also GES 302 is taught by us as one class for geology or biology credit. The Bio 302 enrollments are not included here for our load.

Examples of erroneous figures include

GES 111	- 12 students per offering
GES 300	- 54 students per offering
GES/BIO 302	- 7 students per offering
GES 321	- 4.3 students per offering
GES 493 GES 494	- special topics classes (readings) taught as an overload for which the faculty have received no compensation.

We tend to avoid giving regular classes to fewer than 3 students unless it is absolutely necessary (for graduation) or in the student's best interest.

Revised figures for courses when given (students/offering)

GES 101	221
GES 102	22
GES 110	53
GES 111	12
GES 201	5
GES 202	2+
GES 300	54
GES/BIO 302	7
GES 305	2
GES 311	5
GES 312	6
GES 321	4+
GES 335	14
GES 407	3
GES 421	4+

The Dean states that "It is clear to the APRC and to me that the Department of Geological Sciences cannot continue to offer programs of high quality in its current state" (p.1) Where did this conclusion come from? This is nowhere stated in the review. Quite the contrary! For example, the Review Committee review states that "We also noted the department seems to have placed its students well in graduate programs when appropriate, and regard this as an important measure of the professionalism of the faculty and the viability of the program..." (p.7) Elsewhere the review states that "the faculty are undoubtedly qualified and are both good and well-respected teachers." (p.7)

If the university chooses to move in the direction of significant research activity, the statement (p.3) regarding costs is correct. However, the philosophy of this department is that individual faculty maintain at least a research program of modest proportions commensurate with the philosophy of Bradley University regarding a balance between teaching and research. If the university wishes to promote active research at Bradley, then it should be willing to provide start-up research funds for its new faculty. With that we concur. But we find the present Bradley approach as being the most reasonable and efficacious.

Laboratory renovations are part of any university's internal maintenance play. In other words, it comes with the territory of operating a university. Isn't this covered in the normal operations of the university? We think it is (i.e. Olin Hall renovation.) Also, Jim Fiala, a geology alumnus is contributing \$100,000 toward the renovation of Bradley Hall.

If the university insists on high level research projects by Bradley faculty, then expensive new equipment is certainly necessary. However, we do not see this to be a major problem in our situation. State-of-the-art research equipment is beyond the resources of Bradley University in any sense of the term. Today, given the high cost of investigative technology, scientists normally share big-ticket items between universities. Also, most lower cost routine equipment is obtained through NSF undergraduate equipment awards. In the past, faculty in our department have used sophisticated technology in their research such as the Scanning Electron Microprobe Analyzer (University of Illinois), Scanning Electron Microscope (National Regional Laboratory and Illinois Natural History Survey, cooperative data from CMS and the State University of New York at Binghamton, Rb/Sr Mass Spectrometer (CUNY-Brooklyn) for chemical and radiometric age determinations. This has been at virtually no cost to the university.

The college suggest we would need significantly increased operating budgets to maintain equipment and fund research. Since much of our research requiring high cost equipment is done outside the university very little Bradley money, (besides occasional BRACP start up money) has been used in carrying out our research.

Is the university suggesting that the Geological Sciences Department is responsible for other "productive" departments being starved for resources? (Dean's response, P.3). There is precious little wealth contained within the confines of the Geological Sciences Department. Remove all the high tech research equipment housed in the department tomorrow. It will not impact our continued teaching and research activity one iota. We would still have access to Scanning Electron Microbe Analyzer (University of Illinois, the Chemical Facilities available at CMS (Utah) and SUNY - Binghamton, the ION Probe at the USGS, etc.

The APRC review states that "serious consideration should be given to immediate hiring of at least one or two additional permanent tenure-track faculty (in addition to Foster and Helenek)" (p.16). At present, we see justification in filling Gorman's vacancy to return to our long-term complement of three faculty. A new faculty (Assistant Professor level) to replace Gorman who was a full professor would entail a savings in salaries within the department.

We are not requesting new faculty or equipment resources although both might be desirable in the future (APRC review p.16-17.)

We see no evidence in the APRC review to suggest that the Geological Sciences Department is "struggling" as stated in the Dean's recommendation (p.3)

We disagree with the statement that implies that we are not among the strongest and most vigorous programs in our college (Dean's response, p.4). If you take into account our small size and other obstacles we have faced, we feel we match up well with the best programs at Bradley University particularly pertaining to the percentage of BU Geological Sciences graduates who do find viable well-paying employment.

We strongly disagree with the proposal to eliminate the Geological Sciences Department along with its majors and minors. Some of the reasons for our views are given below:

1. "Geoscience remains an integral core discipline at virtually all of the best colleges and universities in the U.S." (APRC Review, p.13) We think Bradley would wish to be ranked among the high quality institutions in this regard.
2. Bradley University has touted its variety of offerings. Eliminating Geological Sciences would remove student exposure to a variety of subject including environmental issues such as global warming, climatology, environmental hazards, etc.
3. Eliminating Geological Sciences will negatively impact the GEN ED science course offerings, Teacher Education programs, the Environmental Science program, and Civil Engineering programs. The APRC

report particularly stressed our importance to Teacher Education and Environmental Science. "According to the NSTA standards that the program at Bradley must meet, all science majors must have some course work in earth sciences. In the absence of Bradley's geology program, all other science departments would have to teach courses in earth science in order for Bradley to maintain science teaching certification programs. "In the last 15 years, the Geological Sciences Department has produced more secondary-school science teachers than either Chemistry or Physics. These graduates are of very high quality and most have gone on to productive teaching careers." (p.6) "The department has been notably successful in supporting the Teacher Education Program at Bradley and being among the leading departments over the last 15 years in producing certified secondary science teachers" (p.9) "(Geological Sciences) is a critical component of inter-disciplinary programs in environmental science" (p.12). Environmental Science cored by geology.....is the best approach for teaching non-science majors how science functions and how most science is interdisciplinary." (p.13)

4. Without geology, there will be no base for future addition of basic geography courses as was proposed by former administrators in the College of Liberal Arts and Sciences and Education.
5. A significant and varied scientific expertise resource will be lost to both Bradley and the local community.
6. We will lose our standing as a U.S. Government Repository which has supplied field information to the University Community particularly Biology and Civil Engineering and the public at large.
7. It will alienate from Bradley University an unusually loyal number of alumni who support the department and the university.

We hope this clarifies our position regarding the future of the Geological Sciences Department at Bradley University. The proposed elimination of the Geological Sciences Department does no good either to the department, the college, or the university both in the short term and in the long run. The group dynamic in the department has been changed considerably with the departure of our senior faculty member. We feel it would be highly desirable at this time for all parties concerned to initiate a harmonious, cordial, professional, and respectful manner of interaction with one another which will benefit both the department and the administration.

Prepared by Henry and Merrill
February 25, 2005