**University of Newson**

In 2009 Dr. Donnelly and his colleague, Dr. Ranson, both from the Newson department of geology, attended their first national workshop, Strengthening your Geoscience Program.

**Newson and the Department of Geology**

The University of Newson is a public research university with approximately 20,000 undergraduate and 7,000 graduate students. There are 14 tenure-track faculty and 2 adjuncts in the Geology department, with an additional 5 tenure-track positions under the search process. The department serves 60 undergraduate and 45 graduate students. Unlike other universities, Newson enjoys funds from an endowment that the geology department can use to cover staff salaries, underwrite field trips, and provide stipends for graduate students. As a research university there is pressure to bring in research grants as well as good graduate students. In this department undergraduate students have the opportunity to engage in research with faculty members. There has been a recent cut in operating budgets.

**Workshop**

When Donnely and Ranson attended the 2009 workshop their department was anticipating a conversion from the quarter to the semester system within two years, accompanied by corollary changes in research, course revisions, a set of alternate year course offerings, and revised requirements for majors. Faculty members got [and get] along together well, but there was unspoken disagreement in how to approach the field of geology. In 2009 faculty members held two different views of geology, or “the soul of geology” as Ranson remarked. Professors who shared one view considered geology to basically include fieldwork and the study of rocks. Professors who held a different view favored an increased focus on earth systems and climate change. When they applied to the workshop there had been 3 recent retirements, and another three were pending.

**Goals**

Donnely and Ranson attended the 2009 workshop to gather experience and information that would inform the semester and course conversions as well as shifts in their faculty. In the action plan they developed at the workshop they outlined the steps they planned to take in order to develop a new geology curriculum for the conversion and obtain the whole department’s approval for it within a year.

The professors found the workshop useful. They reported that they benefitted from talking with colleagues at other universities and colleges, particularly those from research universities, and that the workshop helped them focus their thinking on the semester conversion. At a later date Donnely expanded on the benefits of speaking with colleagues:

We came to the realization that there is a whole community out there that is interested in working on the pedagogical side of geology. Before this our focus was on research and we were not really considering the innovative ways of teaching students.

**Outcomes**

Though summer intervened between the workshop and the start of the fall semester, Donnely and Ranson drafted a new geology program that they considered to be more streamlined for students in their first two years, and remapped the semester program. In addition, they put together a matrix for their own courses. The workshop experience played into their thinking to some extent:

For us it was quite interesting. We had never thought about a method of developing courses, theories, and it was useful to stand back to think about what we are doing and the reasons behind it.

During a fall 2009 interview they identified their key challenge as hiring new faculty, and acknowledged its utmost importance.

It is so important who we hire and in what disciplines. If we have an open process we will have a lot of discussion about that. The challenge is to get the faculty to agree in the direction to go in light of the new hires.

Inherent challenges in the hiring process are understandable given that faculty members held two somewhat differing views of geology, and some intended to hire professors with a more interdisciplinary approach to teaching.

**September 2011**

By the fall of 2011, all course revisions had been completed and approved, each with curricular objectives. A number of courses were combined and new courses developed during the process to align them with new faculty members’ fields and interests, such as film and ice age mammals. The number of courses dropped by about 25% while the number of faculty increased. At this time Donnely is thinking about different ways to approach the course-faculty balance including team teaching and field camps.

Faculty hiring was successful. Two years ago the number of faculty was 12-13 and, with new hires, will jump to 19 in 2011-12. All five new faculty members are tenure track and two of them are assistants in geological numerical modeling and Quaternary geochronology. The other three focus on carbon and nitrogen cycling in water and terrestrial environments; future global change using organic and stable isotope biogeochemical tools; and isotope biogeochemistry and radiocarbon dating to answer questions about modern and extinct mammal communities. Three more searches are underway and a fourth search failed. Happily, last year’s external review was so positive that the university was impressed and provided funds for 5 years for two new research professors, who will be expected to raise their own funds after five years. These two searches are open.

The average age of professors has dropped considerably from an average of 58 two years ago. Donnely reported a general lack of tension between the older and younger faculty, adding that older faculty help the younger, and that younger faculty members are writing grant proposals that include older, more established professors. While a slight undertow remains between the two views of geology, Donnely expects this to disappear.

One challenge the department faces is a change in the dean. The current dean is stepping down this summer with her replacement taking over in August. As Donnely noted, it is not a given that the new dean will honor and carry through on the geology searches. Therefore, the department must fill these positions this spring.

**Summary**

* Drs. Donnely and Ranson found that as a consequence of attending the workshop they focused on the impending university semester conversion. The geology faculty successfully revised and received approval for courses they revised and developed. Donnely and Ranson used the curriculum matrix during this process.
* Added courses reflected new faculty members’ interests.
* The department hired 5 new tenure track faculty members. A search for an additional 3 is open. The university has approved two additional positions for research professors. This was an outcome, in part, of a positive external review.