Biology

Over the past year, the Department of Biology conducted an evaluation of the newly implemented approaches to the Biology 101 and Biology 102 introductory courses. The major changes included breaking the one lecture section into multiple, smaller sections of approximately 20 students, affording each instructor the opportunity to better engage the students with a variety active learning techniques that were impossible before. The learning goals of content and application were assessed, via a direct measure of student performance utilizing a pre- and post- exam series, and these suggested that the students acquired an improved understanding of the course content relative to the years before. In addition, in response to a questionnaire, students overall indicated a positive attitude toward the course and their ability to learn the course content and as well as a positive experience with the active learning approaches. Overall, the data indicate that the efforts taken by the Department of Biology have been successful not only in promoting student learning but student retention within the major. While we will need to continue this assessment to acquire data beyond a single year, we believe that we have made great strides toward meaningful improvement of our curriculum. With this information, going forward, the Department of Biology will 1) continue to make nuanced changes to this newly established first year curriculum and 2) build on the approaches of the first year experiences as we transition our efforts to the second year curriculum.

Computer Science

The Computer Science (CS) department administers a standardized test – the Major Field Test, developed by ETS – to all graduating seniors each year. This test provides an overall score for the department as well as subscores of three content areas that we can compare to other departments who administered the test. Two factors that complicate assessment are the small sample sizes and high variability in instruction quality. This year, we had 12 graduating seniors, and the majority of courses in the major have been taught by visiting and adjunct faculty during their time here. Therefore, drawing meaningful conclusions from the results is difficult, but we look for any consistency and trends in the data. This year, our results show a continuation of a recent series of low scores in two areas and a large drop in a third in which our students have traditionally scored well. Possible explanations are 1) random noise, 2) less-prepared students entering the major, and 3) poor quality instruction. The first is a given, we have no data regarding the second, and the third is the only one at all under our control. We have taken the steps of hiring an additional tenure-track instructor and increasing oversight and mentoring for instructors in the department.

Environmental Studies

Our unit investigated the acquisition of knowledge in earth science and in the relationship between human beings, society and the environment, among ES majors. We found that ES majors' knowledge in both areas improved. Our analysis suggested that one of our pre-test/post-test questions may be poorly worded, which may account for the contradictory assessment results for goal 3. We also found that students were extremely confident about their knowledge of the relationship between human beings, society and the environment, and, over time, confident about their knowledge of earth science. ES has used this data to update our StrAP, and will also use it to improve our assessment instruments.

Political Science
As part of our spring 2018 assessment efforts, we noted the need to integrate more assignments at the 200- and 300-levels that ask students to synthesize multiple and competing perspectives. Such skills were clearly called for in the current assignment. Students needed, for instance, to do a better job of understanding the policy problem from the perspective of likely political opponents. We also noted the need to give particular attention to underlying assumptions and implications. Had the students done better this spring, they might have better situated their proposed policy solutions in thorough understandings of the problems. We recognize that no single assignment is sure to elicit all of the desired components of any of our learning outcome goals. While the group expressed approval of this particular assignment, it's possible that the space limitations embodied in the assignment lead students to write a little less than they otherwise might have.

Finally, reading these papers generated a useful conversation about how students succeed (or not) at writing abstracts. In our way of thinking, abstracts are an instance of concise writing, and that's something we want our students to be proficient at doing. Specifically, we want our students to be able to concisely frame the topic at hand while signaling that they understand how their specific work fits into a larger intellectual context. At least one member of the department who has not done much in the way of teaching how to write an abstract reported that he will work on this in the future.

Psychology
This past year we assessed the following student learning goals: the learning of key concepts in our psychology 100 class, the ability to critically think about and applying psychological principles related to research design and analysis, as well as principles applying psychological outcomes to everyday life and social situation in the context of appropriately using ethics to understand the limitations of psychological knowledge. The data suggests students were successfully exposed to a psychology curriculum that demonstrates these learning goals. Direct measures from the introductory level course in psychology suggest students demonstrated knowledge of most subfields in Psychology. Indirect measures from a senior student exit survey and a survey of faculty teaching and updating our Statistics course in the department also suggest students have been exposed to a consistent level of instruction regarding the critical analysis, interpretation, reporting, and execution of scientific inquiry within the science of psychology.

Sociology
We now have two different instructors who teach SOC 290: History of Social Thought, in a rotation that is designed to make it so that no one instructor is teaching more than one writing intensive course per semester. While we feel that we share goals and have developed similar (though not identical) courses, we wanted to assess the learning outcomes of our students in each course. As such, we utilized the same assessment tool that we successfully used last year in our introductory courses in order to measure those same broad sociological learning outcomes.

While we were not able to answer the question for which we designed our assessment this year, we know that at least one of the theory course is meeting core sociological competencies, and thus that our students are getting consistent education reflecting core sociological learning goals in both our introductory and one theory course. Since the instructors teaching theory feel that they are teaching comparable courses, we feel reasonably confident that we are meeting these goals across our theory courses. Another round of assessment could, of course, verify this.