

College of Letters and Science

Assessment Report

May 1, 1998

Department or Program Name: Statistics

Abstract

Exit surveys were distributed to all 1997-98 graduates and alumni surveys were sent to all 1990 Ph.D. graduates. Members of the Department's Assessment Committee read reports written for Statistics 424, Experimental Design, by undergraduate majors.

Current graduates are very satisfied with their educational experiences in our programs and are embarking on careers as statisticians. Suggestions for improvements fall into two categories. First, the M.S. and Ph.D. students believe that we need to offer a wider variety and greater number of courses. Because a reallocation of resources from our service courses to our graduate courses is not possible, this objective cannot be achieved without additional funding for the Department. Second, the graduates made several suggestions for improving both advising and computer training. We can make some improvements in these areas with current resources.

Only two of the 12 Ph.D. graduates from 1990 responded to our survey. They have both been very successful---one is a tenured associate professor and the other is a statistician for a major corporation. The professor has 18 publications, and while the corporation neither encourages nor rewards external publications, that alumnus has 14 publications. Interestingly, the industry-employed statistician concurs with our current graduates in the need to improve our computer training and to offer more graduate courses.

The undergraduate majors demonstrated satisfactory ability at applying theoretical knowledge to applied problems and to describing findings in writing.

Assessment Tools Used:

Direct Indicators

Graduate Undergraduate
Program Major

Student Portfolios _____ Yes _____

Indirect Indicators

Graduate Undergraduate
Program Major

Student Surveys ___ Yes _____ ___ Yes _____

Alumni Surveys ___ Yes _____

Narrative:

We assessed our undergraduate, M.S., and Ph.D. programs.

Our undergraduate program is very small. One person graduated in December, 1997, and two graduates are expected in May, 1998. (The number of majors has grown and we expect to have 6--10 graduates next year.) Statistics 424, Experimental Design, is required for the major and is a writing intensive course. In Statistics 424, each student performs a data collection experiment, analyzes the data, and writes a report. These reports were examined by members of our Assessment Committee. The undergraduate majors demonstrated satisfactory ability at applying theoretical knowledge to applied problems and to describing findings in writing. Disappointingly, none of the three graduates chose to respond to our survey. Our assessment efforts are limited, but are commensurate with the size of the program.

Only four of 16 current M.S. graduates responded to our survey. Approximately five of the 16 are continuing in our Ph.D. program and none of these persons responded. The survey asked for the graduate's immediate career plans, and perhaps we will obtain more responses once plans are finalized. We were pleased to discover, however, that the respondents are very happy with their experiences in our department.

Three of our graduating Ph.D. students responded to our survey. Again, we suspect that some are waiting until after they accept a job to respond. The respondents expressed enthusiastic satisfaction with their educational experiences at Wisconsin.

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Interestingly, the respondents, be they current M.S. graduates, current Ph.D. graduates or the industry-employed alumnus, had similar suggestions for improving our program. In particular, they feel that we need to improve our computer training and advising. These are areas we will be examining carefully in the upcoming months. They also suggested that the Department offer a greater number and greater variety of graduate courses. With current resources, we see no way to address this concern directly. Perhaps we can develop some creative ways to achieve these goals with current staffing.

It seems clear that we will need to increase our efforts next year to improve the response rates of our various surveys.

It remains to be seen whether annual assessment is "overkill." Our graduate program has a strong national reputation, our graduates find jobs as statisticians and become leaders in the field, and the information to date, albeit limited, suggests that only minor adjustments in our program are needed. It will be interesting to discover whether next year's assessment activity adds to the knowledge we have gained this year.