

Highlights about the NRC Project and Methodology

The National Research Council produces an evaluation of the nation's graduate programs roughly every 10 years. The study was last conducted in 1995. The latest iteration covers more programs (59) and has collected more data than the previous two reports. There are 220 institutions participating in the NRC, which includes program data for over 5000 programs.

UNC-Chapel Hill has cooperated with the study, compiling data for each program, as well as providing input on the NRC's methodology. The results are based on data collected for the 2005-06 academic year and earlier. We have 53 programs participating in the NRC study. Our programs are fairly evenly split among the arts and humanities, life sciences, physical sciences, mathematics and engineering, and the social and behavioral sciences.

Institutional Research will be helpful in identifying key variables that might influence rankings. No one variable will be critical for all programs as the methodology allows for each field to be rated differently based on its own disciplinary priorities. We may also need to assess whether data has changed significantly in the past several years since it was submitted to NRC.

Although the report seeks to avoid explicit program or university rankings, it will have a section that uses formulas to give every program an overall range of scores. The methodology behind these ranges of rankings, as opposed to a single ranked list for each discipline, is very complex.

Based on criticisms of previous NRC assessments, the methodology of the current study was refined to rely more heavily on quantitative, objective data and to better reflect the uncertainty associated with measuring program quality. Instead of calculating a single rank per program, the NRC is using a re-sampling statistical technique (similar to a Monte Carlo method) to produce a range of rankings that account for statistical error, year-to-year variations in metrics, and the variability of faculty ratings.

The methodology used by the NRC is considerably more complicated than the approach used by other ranking bodies, such as *U.S. News & World Report*. Though the actual rankings are derived from objective data on 20 key program characteristics, the weights applied to these data were developed through faculty surveys gathering faculty's direct statements about the relative importance of various attributes as well as weights inferred from faculty's rankings of a sample of actual programs.

To gather data on the importance of the 20 indicators, faculty members in each field were asked to directly rate which characteristics were the most important aspects of a quality PhD program. Using a different approach, a second set of weights were created using a sample of faculty in each discipline who were asked to rate a sample of specific programs. Statistical techniques were used to infer the weights that best predicted the stated estimates of program quality.

These two sets of weights were used to generate the ranges of rankings to be published in the final report. As soon as the NRC rankings are released, the Graduate School and Institutional Research will disseminate the results to programs and work with each of you to identify areas for further analysis and comparisons.