Interpreting the Multi-Year Benchmark Report

For institutions that have participated in multiple NSSE administrations, this Multi-Year Benchmark Report presents recalculated and comparable benchmark scores by year so that patterns of change or stability are discernible. It also provides statistics such as number of respondents, standard deviation, and standard error so that shorthand mean comparison tests can be calculated. This report is necessary because improvements and modifications have been made over time, making multi-year analysis of NSSE data more complex. Specifically, the following issues are relevant:

- All items in question 7 were rescaled in 2004, making newer results on these items incompatible with those of 2003 and earlier. Therefore, it is not possible to compare the 2004-2010 Enriching Educational Experiences benchmark with prior years (2001-2003). Also, an alternate version of the Student-Faculty Interaction benchmark – labeled ‘SFC’ – removes the ‘research with faculty’ item, allowing this revised version to be compared with prior years (2001-2003).

- In 2004 NSSE changed the way benchmarks were calculated, requiring that benchmarks prior to 2004 be recalculated to more accurately compare institutional performance across years.

- Scores from NSSE 2000 are not included because several significant changes were made to the survey instrument and benchmarks beginning in 2001, making year-to-year comparisons unsuitable.

- The samples used to develop institutional estimates have been refined in recent years, making direct comparisons of reported benchmarks over the years potentially less stable.

This report has three main parts: (a) a table of data quality indicators (p. 3), which provides a quick reference to important statistics for each year’s participation, (b) multi-year charts, and (c) detailed statistics. Key terms and features of (b) and (c) are illustrated below.

For more information and recommendations for analyzing NSSE data over time, consult the Multi-Year Data Analysis Guide on the NSSE Web site. nsse.iub.edu/pdf/NSSE Multi-Year Data Analysis Guide.pdf

Key Terms and Features in this Report

**Y-Axis**

Benchmarks are computed on a 0 to 100 scale, however nearly all institutional scores are between the y-axis values of 15 and 85.

**Benchmark Score**

The benchmark score is the weighted average of the students' scores, using only randomly sampled students (including those from census administrations) from each year's data.

**n**

Unweighted number of respondents represented in the data.

**SEM**

Standard error of the mean is how much a score based on a sample may differ from the true population score. SEM is used to compute confidence intervals.

**Level of Academic Challenge (LAC)**

Multi-year charts appear on pages 4 & 6

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**Multi-year detailed statistics**

appear on pages 5 & 7

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**Error Bars/Confidence Intervals**

Error bars around each benchmark score show the upper and lower bounds of the 95% confidence interval (mean +/- 1.96 * SEM), a range of values 95% likely to contain the true population score. "Upper" and "Lower" limits are reported in the detailed statistics tables. Where confidence intervals do not overlap between years, a statistically significant difference (p < .05) is likely to be present.

**Year**

All NSSE administration years are listed regardless of participation.

**SD**

Standard deviation, the average amount by which students' scores differ from the mean.