

# Institutional Analysis, Assessment & Reporting

## Using National Survey of Student Engagement Results for New Freshmen to Predict One-Year Retention

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This short research note documents the failure to find a useful relationship between student responses on the National Survey of Student Engagement (NSSE) and one-year (fall-to-fall) retention rates. The number of items which were statistically significant was approximately equal to the number that might be expected by chance when the same data are repeatedly queried. Of the 88 tests conducted, only 5 reached statistical significance, and only 2 made intuitive sense.

The study was based responses to the 2004 and 2006 NSSE by new freshmen who enrolled at Boise State for the first time during the previous fall term seeking a bachelor's degree (N=203). Students' status the following fall term was then recorded (1=enrolled, 0=not enrolled). Chi-square tests were calculated for groups of NSSE items that had categorical responses, and t-tests were used to check for differences on responses that could be considered interval level data, including the five NSSE benchmark scores. The item groups were as follows:

Group:	Number of items tested:	Results:
Educational experiences in and out of class	22	Two statistically significant results, though the pattern of findings looked random. At least one significant result could be expected by chance
Mental activities emphasized in coursework	5	Nothing statistically significant
Student course workload and exams	8	One statistically significant item, though pattern of findings looked random.
Enriching educational experiences that students plan to do	7	Nothing statistically significant
Relationships with other students, faculty, and staff	3	Nothing statistically significant
Time spent on activities (e.g., classes, work, child care, etc.)	8	Nothing statistically significant
Perceptions of the campus environment	8	Nothing statistically significant
Institutional contribution to development of knowledge and skills	16	Nothing statistically significant
Other items which might relate to retention	6	Two statistically significant items, which also showed a coherent pattern. Students who estimated that they would graduate in 4 years compared to later were more likely to be retained, as were students who indicated that family and friends were very supportive of them
Benchmark scores	5	Nothing statistically significant
Total number of tests:	88	5 tests reached statistical significance

Other institutions have also come to a similar conclusion. A recent study by Gordon et al. (2008) also concluded there was little explanatory power in the NSSE benchmarks or individual items for freshman retention.

Reference:

Gordon, J., Ludlum, J., & Hoey, J. J. (2008). Validating NSSE against student outcomes: Are they related? *Research in Higher Education*, 49(1), 19-39.