

One way to estimate reliability, specifically the temporal stability, of FSSE results is by an institution-level correlation analysis. Assuming no major shifts in an institution's policies, we would expect an institution to have relatively similar FSSE scale scores from one year to the next. It is possible that results for a given institution may vary substantially from one administration to another—this is more likely to occur for schools that have a small number of respondents. Gradual changes over longer periods of time are much more likely, and should not be interpreted as unreliability. Overall, however, we would expect the correlation between institutions' scale scores from year to year to be relatively high.

Data

In 2015, FSSE scales for 27 institutions that participated in both the 2014 and 2015 FSSE survey administrations were analyzed. One limitation of these data is that institutions were not randomly selected for participating in both years of the survey.

Methods

Correlations, quantified using Pearson's r , were conducted using the ten FSSE scales, comparing the institution's FSSE scale scores in 2014 to their scale scores in 2015. Pearson's product-moment correlation coefficients, or Pearson's r , range in value between negative and positive one. Values closer to one indicate a stronger relationship between institutions' previous and current scale scores; values closer to zero indicate a weaker relationship between the two scale scores.

Results

Values of the Pearson's r correlation results for the overall analyses can be found in Table 1. Correlations range between .456 for lower-division Higher-Order Learning and .838 for lower division Quality of Interactions. Although correlations tend to be slightly lower for the Higher-Order Learning scale for both lower- and upper-division faculty, all correlations are relatively high. This suggests that institution-level FSSE scale scores are relatively stable from year to year overall.

Table 1 2014-2015 FSSE Scale Score Correlations by Division¹

	Higher-Order Learning	Reflective & Integrative Learning	Learning Strategies	Quantitative Reasoning	Collaborative Learning
Lower-division faculty	.456	.632	.660	.518	.711
Upper-division faculty	.546	.718	.674	.678	.686
	Discussions with Diverse Others	Student-Faculty Interaction	Effective Teaching Practices	Quality of Interactions	Supportive Environment
Lower-division faculty	.838	.791	.656	.855	.711
Upper-division faculty	.744	.575	.623	.759	.781

¹ All correlations are significant at the $p < .01$ level.