

BCSSE Institutional Report Mean Scale Scores and Selected Student Comparisons Indiana State University



BCSSE 2018 Mean Scale Scores and Selected Student Comparisons

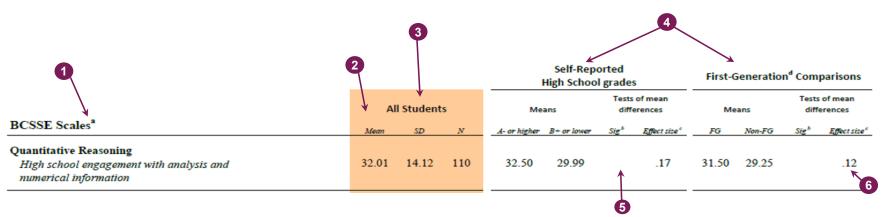
BCSSE Scales

BCSSE Scales scores were calculated by converting the responses for each item to a 0-60 range. A mean scale score was then calculated for each student. Below is a brief description of each scale with the component BCSSE items in parentheses.

Scale name	Description							
Quantitative Reasoning	High school engagement with analysis and numerical information							
Learning Strategies	Use of effective learning strategies in high school.							
Collaborative Learning	Expectation to interact and collaborate with peers							
Student-Faculty Interaction	Expectation to interact and engage with faculty							
Discussions with Diverse Others	Expectation to engage in discussions with diverse others							
Academic Perseverance	Student certainty that they will persist in the face of academic adversity							
Academic Difficulty	Expected academic difficulty during the first year of college							
Perceived Academic Preparation	Student perception of their academic preparation							
Importance of Campus Environment	Student-rated importance that the institution provides a challenging and supportive environment							



BCSSE 2018 Mean Scale Scores and Selected Student Comparisons Interpreting Mean Results



- 1. *Scale*: The BCSSE Scale appears in the left column of the report. All scores are in a 0-60 range.
- Mean: The unweighted scale mean is reported overall for the institution, as well as by high school grades and first-generation status.
- Institutional Level: Results for each item for the institution overall.
- Selected Student Comparisons: Results for each item by selfreported high school grades and first-generation status.
- 5. Statistical Significance: Items with mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks, referring to three significance levels (p<.05, p<.01, and p<.001). The smaller the significance level, the smaller the likelihood that the difference is due to chance. Statistical significance does not guarantee the result is substantive or important. Large sample sizes tend to generate more statistically significant results even though the magnitude of mean differences may be inconsequential. It is recommended to consult effect sizes to judge the practical meaning of the results.
- 6. Effect size: Indicates the "practical significance" of the mean difference. It is calculated by dividing the mean difference by the pooled standard deviation. In practice, an effect size of .2 is often considered small, .5 moderate, and .8 large.



Selected Student ComparisonsIndiana State University

				Self-Reported High School grades				First-Generation Comparisons			
BCSSE Scales (Scores range from 0-60)	All ISU Students			Means		Tests of mean differences		Means		Tests of mean differences	
	Mean	SD	N	A- or higher	$B+\ or\ lower$	Sig b	Effect size c	FG	Non-FG	Sig b	Effect size c
Quantitative Reasoning											
High school engagement with analysis and	26.13	14.68	375	28.21	24.11	**	.28	25.18	26.79		11
numerical information											
Learning Strategies											
Use of effective learning strategies in high school	35.86	13.51	378	37.25	34.46	*	.21	36.43	36.02		.03
Collaborative Learning											
Expectation to interact and collaborate with	37.36	12.24	351	37.40	37.26		.01	38.19	37.00		.10
peers											
Student-Faculty Interaction											
Expectation to interaction and engage with	31.84	14.02	350	31.18	32.35		08	33.39	30.25	*	.23
faculty											
Expected Discussions with Diverse Others											
Expectation to engage in discussions with diverse	43.25	14.60	345	45.29	41.05	**	.29	43.96	43.02		.06
others											
Expected Academic Perseverance											
Student certainty that they will persist in the face	40.73	11.14	344	41.27	40.17		.10	40.72	40.84		01
of academic adversity											
Expected Academic Difficulty											
Expected academic difficulty during the first year	29.19	10.44	341	27.99	30.47	*	24	27.59	31.02	**	33
of college											
Perceived Academic Preparation											
Student perception of their academic preparation	41.26	10.21	332	43.15	39.31	***	.38	41.73	40.83		.09
Importance of Campus Environment								-			
Student-rated importance that the institution provides a challenging and supportive environment	44.90	10.67	332	45.08	44.63		.04	45.76	44.24		.14

^b T-test results (2-tailed): * p<.05, ** p<.01, *** p<.001. The smaller the significance level, the less likely that the difference is due to chance.

^c Effect size is the mean difference divided by pooled standard deviation. It indicates the practical significance of the mean difference (effect size .2 is often considered small, .5 is moderate, and .8 is large).

^d First generation is defined as no parent or guardian having graduated with a 4-year college degree.