

**Grand Frequencies and Means** 



#### **About this Report**

The BCSSE 2020-NSSE 2021 Combined Report provides a useful summary of the detailed information contained in students' BCSSE and NSSE responses. This report contains a summary of administration details, cross-sectional results, longitudinal results, and participating institutions.

#### **Report Sections**

Administration Details (p. 3) Provides important information regarding the population and respondent counts, as well as respondent characteristics.

Cross-sectional Results (p. 4) Based on all first-year student respondents from institutions' BCSSE 2020 and NSSE 2021

administrations (in contrast to the longitudinal results which contain only matched data), these data provide the best estimates of students' pre-college characteristics and their engagement during the first year. By displaying cross-sectional results side-by-side, it is possible to identify areas of correspondence and gaps in engagement for better understanding of the first-year

student experience.

Longitudinal Results (p. 9) Compares BCSSE 2020 and NSSE 2021 results for students who completed both surveys.

Means for BCSSE scales and NSSE Engagement Indicators (EIs) are presented for students grouped by expectations for grades ('A- or higher' and 'B+ or lower') and expectations for studying ('16 or more hours per week' and '15 or fewer hours per week') and whether the expectations were met. These results reveal which BCSSE scales and NSSE EIs are associated

with entering grade expectations and meeting those expectations.

Participating Institutions (p. 13) A complete list of institutions by Basic Carnegie type included in this report.

#### **BCSSE Scales and NSSE Engagement Indicators**

Three BCSSE Scales and all Ten NSSE Engagement Indicators are included in the longitudinal section (see the box at right). The BCSSE Scales and corresponding NSSE EIs provide valuable information about distinct aspects of student engagement by summarizing students' responses to sets of related survey questions. Each BCSSE Scale is a combination of three to seven items.

The BCSSE Scales are constructed using the same approach as the NSSE EIs. Each scale is scored on a range from 0 to 60. First, component items are converted to a 60-point scale (e.g., never=0, sometimes=20, often=40, and very often=60), and then averaged to create student-level scores. Institutional scores are the averages of students' scores. Student-level scores for both the BCSSE Scales and NSSE EIs are included in BCSSE-NSSE data file.

For more information about BCSSE, visit bcsse.indiana.edu.

For more information about the NSSE EIs, see the *Engagement Indicators* report or visit nsse.indiana.edu/nsse/survey-instruments/engagement-indicators.html.

BCSSE Scales and NSSE Engagement Indicators in the Longitudinal Results

#### **BCSSE Scales**

Expected Academic Perseverance Perceived Academic Preparation Importance of Campus Support

#### **NSSE Engagement Indicators**

Higher-Order Learning
Reflective & Integrative Learning
Quantitative Reasoning
Learning Strategies
Collaborative Learning
Discussions with Diverse Others
Student-Faculty Interaction
Effective Teaching
Quality of Interactions
Supportive Environment



# Administration Details Grand Frequencies and Means

This section provides important information about the population, sample, and number of first-year respondents for both BCSSE and NSSE. It also includes respondent characteristics for the cross-sectional and longitudinal results that follow. This information can be useful for assessing data quality and planning future BCSSE administrations.

#### **BCSSE 2020-NSSE 2021 Population and Respondents**

	Count
BCSSE 2020 respondents (cross-sectional data)	29,967
First-year students included in NSSE 2021 population file <sup>a</sup>	
BCSSE 2020 respondents identified in the NSSE 2021 population file <sup>a</sup>	
BCSSE 2020 respondents invited to participate in NSSE 2021 <sup>b</sup>	
NSSE 2021 first-year respondents	12,745
BCSSE 2020-NSSE 2021 matched respondents (longitudinal data) <sup>a</sup>	7,244

a. BCSSE respondents identified later in the NSSE population file who are not first-year students are excluded from this report.

b. Adjusted to exclude students identified as ineligible, survey invitations returned as undeliverable, or because a NSSE census administration was not conducted

Respondent Characteristics	Cross-sec	tional (%)	Longitudinal (%)
	BCSSE <sup>a</sup>	NSSE <sup>b</sup>	BCSSE-NSSEc
Gender			
Man	40	33	30
Woman	59	65	67
Another gender identity	1	1	1
Prefer not to respond	1	1	1
Race/ethnicity			
American Indian or Alaska Native	0	0	0
Asian	8	9	10
Black or African American	8	7	6
Hispanic or Latino	9	8	7
Middle Eastern or North African	1	1	1
Native Hawaiian or other Pacific Islander	0	0	0
White	58	59	61
Another race or ethnicity	0	0	0
Multiracial	15	13	12
I prefer not to respond	0	2	2
Enrollment status			
Full-time	98	97	99
Less than full-time	2	3	1

a. Student-reported characteristics for all BCSSE 2020 respondents.

 $b.\ Institution-reported\ enrollment\ status,\ and\ student-reported\ gender\ and\ race/ethnicity\ for\ all\ NSSE\ 2021\ respondents.$ 

c. Student-reported characteristics for matched students who completed both BCSSE 2020 and NSSE 2021.



# BCSSE 2020-NSSE 2021 Combined Report Cross-Sectional Results

**Grand Frequencies and Means** 



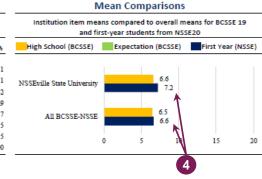
## Cross-Sectional Results Grand Frequencies and Means

Frequency Distributions

This Cross-Sectional Results report presents item-by-item student responses and mean comparisons from institutions' BCSSE 2020 and NSSE 2021 administrations (in contrast to the longitudinal results which contain only matched data), providing the best estimates of students' pre-college characteristics and their engagement during the first year. By displaying cross-sectional results side-by-side, you can identify areas of correspondence and gaps in engagement for better understanding of the first-year student experience.

Item wording and variable names:
 Survey items are in the
 same order and wording as they
 appear on the instrument.
 Variable names are included for easy
 reference to the data
 file and codebook.

#### Item wording Variable or description name Count About how many papers, reports, or other writing tasks of the following length? (Select only one.) a. Up to 5 pages hWRshrtmm 138 6 24 38 11 116 32 109 29 11-15 17 20 18 16-20 17 370 Total



Values are used to calculate means. Response options are worded as they appear on the instrument.

2. Values and response options:

3. Count and column percentage (%): The Count column contains the number of students who selected the corresponding response option. The column percentage is the percentage of students selecting the corresponding response option. Percentages may not sum to 100 due to rounding.

4. **Overall mean:** Mean scores for each item for the institution and all BCSSE-NSSE institutions. These results allow institutions to quickly compare their BCSSE-NSSE cross-sectional results with all BCSSE-NSSE cross-sectional results.



# **Cross-Sectional Results Grand Frequencies and Means**

				Frequency Distributions						Mean Comparisons						
				Expected High school first-year NSSE						Institution item means compared to overall means for BCSSE '20 and first-year students from NSSE '21					20	
Item wording or description	Variable name	Values	Response options	Count	%	Count	%	Count	%	High school (BCSSE)	Ex	pectation	(BCSSE)	Firs	st year (N	NSSE)
About how many par	pers, reports, or	other wri	ting tasks of the following len	gth did you com	plete ii	n high scho	ol and	been assig	ned dui	ring your first year?(Sele	ct only	one.)				
a. Up to 5 pages	hWRshrtnum	0	None	1,651	7			863	8							
	wrshortnum	1.5	1-2	5,378	22			2,515	22				_			
		4	3-5	7,539	31			3,531	31				6.8			
		8	6-10	4,931	20			2,386	21	All BCSSE-NSS	E _		_			
		13	11-15	2,025	8			1,066	9				6.3			
		18	16-20	918	4			437	4				•			
		23	More than 20 papers, etc.	1,921	8			569	5							
			Total	24,363	100			11,367	100		0	5	10	О	15	20
b. Between 6 and 10	hWRmdnum	0	None	9,138	38			4,783	42		-			-		
pages wrmednum	wrmednum	1.5	1-2	9,026	38			3,924	35							
		4	3-5	3,851	16			1,665	15							
		8	6-10	1,308	5			601	5	All BCSSE-NSS	Б.	2.1				
		13	11-15	323	1			217	2	All BCSSE-NSS	L	2.0				
		18	16-20	141	1			60	1			2.0				
		23	More than 20 papers, etc.	147	1			84	1							
			Total	23,934	100			11,334	100							
c. 11 pages or more	hWRlngnum	0	None	17,086	72			8,994	79							
	wrlongnum	1.5	1-2	5,148	22			1,510	13							
		4	3-5	959	4			399	4							
		8	6-10	327	1			196	2	All BCSSE-NSSE		0.8				
		13	11-15	106	0			141	1			0.8				
		18	16-20	45	0			41	0			0.0				
		23	More than 20 papers, etc.	99	0			67	1							
			Total	23,770	100			11,348	100		1	1			1	
How many hours in	a typical 7-day w	eek [did y	you/do you expect to/do you]	spend doing eac	h of the	following	?									
a. Preparing for class	hacadpr13hrs	0	0	203	1	36	0	34	0							
(studying, reading,	cacadpr13hrs	3	1-5	7,457	30	1,322	5	931	9				_			
doing homework, etc	.) unprepnrs	8	6-10	7,170	29	4,614	17	1,935	18				10.3			
		13	11-15	4,533	19	6,795	25	2,342	22	All BCSSE-NSS	E			16.7		
		18	16-20	2,656	11	6,960	25	2,264	21	All BC33E-N33	ь			10./		
		23	21-25	1,222	5	4,292	16	1,489	14					16.6		
		28	26-30	568	2	1,950	7	895	8					_		
		33	More than 30	658	3	1,558	6	942	9							
			Total	24,467	100	27,527	100	10,832	100		0	5	10 15	5 20	25	30

a. Blank cells: NSSE items with no match on BCSSE.

b. Weighted NSSE frequencies. See Frequencies and Statistical Comparisons.



## Cross-Sectional Results Grand Frequencies and Means

#### **Frequency Distributions Mean Comparisons** Expected Institution item means compared to overall means for BCSSE '20 NSSE and first-year students from NSSE '21 High school first-year Item wording Variable High school (BCSSE) Expectation (BCSSE) First year (NSSE) % or description name Values Response options Count % Count Count 9,575 b. Working for pay hworkhrs 0 39 6,796 25 cworkhrs 3 1-5 2,909 12 3,286 12 tmworkhrs 17 6-10 2,836 12 4,557 11-15 13 2,875 12 4,285 16 18 16-20 11 3,988 15 2,779 All BCSSE-NSSE 10.8 23 21-25 1,747 7 2,072 8 28 26-30 899 4 1,105 4 749 3 1,346 5 33 More than 30 Total 24,369 100 27,435 100 40 c. Participating in cohcocurrhrs 0 0 2,044 8 2,450 9 4,280 curricular activities ccocurrhrs 3 1-5 5.514 23 7,750 28 3.326 31 (organizations, school tmcocurrhrs 6-10 5,036 21 8,111 30 1,478 14 publications, student 11.5 19 18 8 13 11-15 4,684 5,030 830 government, sports, 16-20 etc.) 18 3,424 14 2,421 9 468 4 All BCSSE-NSSE 23 21-25 898 3 229 2 1.696 4.9 28 3 91 26-30 674 329 5 437 2 122 33 1,317 More than 30 Total 24,389 100 27,426 100 10.824 100 d. Relaxing and hsocial13hrs 0 0 128 1 204 153 socializing (time with csocial13hrs 1-5 5,828 24 5,604 20 1,992 18 friends, video games, tmrelaxhrs 6-10 7,727 32 9,430 34 3,013 28 TV or videos, keeping 11.4 21 25 22 13 11-15 5,006 6.810 2,365 up with friends online, 18 16-20 2,735 11 3,331 12 1,519 14 All BCSSE-NSSE 10.8 23 21-25 5 4 7 1,207 1,154 743 12.8 2 28 26-30 531 398 316 3 2 7 More than 30 1,232 5 509 726 Total 24,394 100 27,440 100 10,827 100 Of the time you spent preparing for class in a typical 7-day week, about how much was on assigned reading? hTMread14 Very little 5,288 22 819 3 1,244 11 2.2 ctmread17 Some 11,783 48 7,345 27 3,869 36 reading About half 21 10,777 39 29 All BCSSE-NSSE 5,141 3,169 3.0 7 26 1.879 17 Most 1.791 7.018 2.7 Almost all 349 1 1,330 5 659 Total 24,352 100 27,289 100 10,820 100

a. Blank cells: NSSE items with no match on BCSSE.



# BCSSE 2020-NSSE 2021 Combined Report Longitudinal Results

**Grand Frequencies and Means** 



## BCSSE 2020-NSSE 2021 Combined Report Longitudinal Results

This Longitudinal Results report compares BCSSE 2020 and NSSE 2021 results for students who completed both surveys. The first longitudinal report shows means for BCSSE scales and NSSE Engagement Indicators (EIs) for students grouped by expectations for grades ('A- or higher' and 'B+ or lower') and, regardless of expected grade, whether their grade expectations were met. The second longitudinal report shows means for BCSSE scales and NSSE Engagement Indicators (EIs) for students grouped by expectations for studying ('16 or more hours/week' or '15 or fewer hours/week') and, regardless of expected study time, whether their study expectations were met.

- Item wording and variable names:
   Displays the percentage of students for each group within the expected first-year grades or hours studying per week and comparison with actual grades or study time.
- Mean: The BCSSE Scales and NSSE EI
  means reported for each group within
  Expected First-Year Grades (p.11) and
  Expected First-Year Study Time (p. 12),
  as well as means for whether expectations
  were met. These results allow institutions
  to better understand the beliefs regarding
  the pre-college beliefs and first-year
  engagement.



- 3. **Mean difference and statistical comparison:** Items with mean differences that are larger than would be expected by chance are noted with asterisks referring to three significance levels (\*p < .05, \*\*p < .01, \*\*\*p < .001). Significance levels indicate the probability that an observed 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. Consult effect sizes (see #4) to judge the practical meaning of differences. Unless otherwise noted, statistical comparisons are two-tailed independent *t* tests.
- 4. **Effect size:** Effect size indicates practical significance. An effect size of .2 is often considered small, .5 moderate, and .8 large. Effect sizes for independent *t*-tests use Cohen's *d*. Cohen's *d* is calculated by dividing the mean difference by the pooled standard deviation. See: Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd edition). New York: Psychology Press.



# **BCSSE 2020-NSSE 2021 Combined Report Analysis by Expected and Actual Grades**

### **Grand Frequencies and Means**

_	Expecte	d First-Year Gra	des	<b>Comparison with Actual Grades</b>				
Percentage distribution	B+ or lower	A- or higher	Count	Did not meet expectations	Met/exceeded expectations	Count		
	39.2%	60.8%	7069	27.0%	73.0%	5611		

Results by Whether First-Year Grade
Results by Expected First-Year Grades
Expectations Were Met

	Res	sults by Expected	Expectations Were Met						
<u>-</u>		Mean	Mean diff.	ES		Mean	Me	an diff.	ES
<b>BCSSE Scales</b>		0	60			0	60		
Expected Academic Perseverance	A- or > B+ or <	44.5	3.8 ***	.43	Met/exceed. Not met	43.1		0.0	.00
Expected Academic Difficulty		28.5	-3.2 ***	32	Met/exceed. Not met	29.8 29.6		0.2	.02
Perceived Academic Preparation		45.8 41.1	4.8 ***	.54	Met/exceed. Not met	44.0 44.1		0.0	.00
Importance of Campus Support		47.7 45.3	2.4 ***	.27	Met/exceed. Not met	47.0 46.5		0.5	.05
NSSE Engagement In	dicators								
Higher-Order Learning		39.9 37.7	2.1 ***	.17	Met/exceed. Not met	40.0 37.0		3.0 ***	.23
Reflective & Integrative Learning		36.8 34.6	2.2 ***	.18	Met/exceed. Not met	36.8 34.6		2.2 ***	.19
Quantitative Reasoning	A- or > B+ or <	29.9 27.6	2.4 ***	.16	Met/exceed. Not met	29.4 27.7		1.7 ***	.11
Learning Strategies	A- or > B+ or <	40.0 36.9	3.1 ***	.23	Met/exceed. Not met	39.8 36.2		3.5 ***	.26
Collaborative Learning	A- or > B+ or <	28.0 25.6	2.3 ***	.16	Met/exceed. Not met	27.7 25.9		1.8 ***	.12
Discussions with Diverse Others	A- or > B+ or <	39.3 37.2	2.1 ***	.14	Met/exceed. Not met	38.8 37.9		0.9 *	.06
Student-Faculty Interaction		19.0 17.8	1.1 **	.08	Met/exceed. Not met	18.5 18.5		0.1	.01
Effective Teaching	A- or > B+ or <	38.3 37.0	1.3 ***	.10	Met/exceed. Not met	38.7 35.9		2.7 ***	.21
Quality of Interactions	A- or > B+ or <	42.3 41.0	1.2 ***	.10	Met/exceed. Not met	42.3 40.4		1.9 ***	.16
Supportive Environment	A- or > B+ or <	33.7 31.9	1.8 ***	.13	Met/exceed.  Not met	33.5 31.5		2.1 ***	.15

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001; ES = Effect size, the standardized mean difference (Cohen's d)



# **BCSSE 2020-NSSE 2021 Combined Report Analysis by Expected and Actual Study Time**

### **Grand Frequencies and Means**

	Expecte	ed First-Year Study	Time	<b>Comparison with Actual Study Time</b>					
Percentage	15 or fewer hours/week	16 or more hours/week	Count	Did not meet expectations	Met/exceeded expectations	Count			
distribution	43.9%	56.1%	7177	37.6%	62.4%	5699			

Results by Expected First-Year Study Time

Results by Whether First-Year Study Time Expectations Were Met

	Results by Expected First-Year Study Time				Study Time Expectations Were Met					
		Mean	Mean diff.	ES		Mean	Me	ean diff.	ES	
BCSSE Scales		0	60			0	60			
Expected Academic Perseverance	16 or > 15 or <	44.5	3.4 ***	.39	Met/exceed.  Not met	42.9		-0.4	05	
Expected Academic Difficulty	16 or > 15 or <	30.0	0.5 *	.05	Met/exceed. Not met	29.5 30.2		-0.7 *	07	
Perceived Academic Preparation	16 or > 15 or <	44.8 42.8	2.0 ***	.22	Met/exceed. Not met	44.0 44.2		-0.3	03	
Importance of Campus Support	16 or > 15 or <	47.8 45.5	2.3 ***	.25	Met/exceed. Not met	46.8 47.0		-0.3	03	
NSSE Engagement In	dicators									
Higher-Order	16 or >	40.3	3.0 ***	.23	Met/exceed.	39.6		1.2 ***	.09	
Learning	15 or <	37.4			Not met	38.4				
Reflective & Integrative Learning	16 or > 15 or <	37.1 34.4	2.7 ***	.23	Met/exceed.  Not met	36.3 36.2		0.1	.01	
Quantitative Reasoning	16 or > 15 or <	30.0 27.8	2.2 ***	.15	Met/exceed. Not met	29.4 28.4		1.0 *	.07	
Learning Strategies	16 or > 15 or <	40.2 36.9	3.3 ***	.24	Met/exceed. Not met	39.6 37.5		2.1 ***	.16	
Collaborative Learning	16 or > 15 or <	28.4	3.1 ***	.21	Met/exceed. Not met	27.9 26.2	ı	1.7 ***	.12	
Discussions with Diverse Others	16 or > 15 or <	39.3 37.3	2.0 ***	.13	Met/exceed. Not met	38.7 38.2		0.5	.03	
Student-Faculty Interaction	16 or > 15 or <	19.2 17.6	1.6 ***	.12	Met/exceed. Not met	18.6 18.2		0.4	.03	
Effective Teaching	16 or > 15 or <	38.5 36.9	1.6 ***	.13	Met/exceed. Not met	38.0 37.9		0.0	.00	
Quality of Interactions	16 or > 15 or <	42.2 41.3	0.9 **	.07	Met/exceed. Not met	42.0 41.4		0.6	.05	
Supportive Environment	16 or > 15 or <	33.7 31.9	1.9 ***	.14	Met/exceed.  Not met	33.0 32.8		0.3	.02	

<sup>\*</sup> p < .05, \*\* p .01, \*\*\* p < .001; ES = Effect size, the standardized mean difference (Cohen's d)



#### Participating Institutions by Collapsed Basic Carnegie Type<sup>a</sup>

**Doctorate-Granting Universities** 

Emory University The University of Tennessee at Chattanooga

George Mason University

The University of Toledo

Indiana University Bloomington

University of Missouri-St. Louis

Miami University-Oxford

Texas A&M University - Corpus Christi

Wake Forest University

Texas State University

Master's Colleges and Universities

Arkansas Tech University Sierra Nevada College

College of Our Lady of the Elms Southern Connecticut State University

Coppin State University Southern New Hampshire University

Holy Family University Thomas University

Mount St. Joseph University University of New Haven

Northern Michigan University Vanguard University of Southern California

**Baccalaureate Colleges and Special Focus Institutions** 

Catawba College Martin Luther College
Central Methodist University Olin College of Engineering
Flagler College Saint Anselm College
Fort Lewis College St. Olaf College

Goucher College The University of Montana-Western

Holy Cross College, Notre Dame, IN William Jewell College

LaGrange College
Lincoln College

a. For information on the Carnegie Classifications, see: carnegieclassifications.iu.edu

b. Basic Carnegie Classification: Special focus institutions.

c. Institutions included in the cross-sectional analysis only.