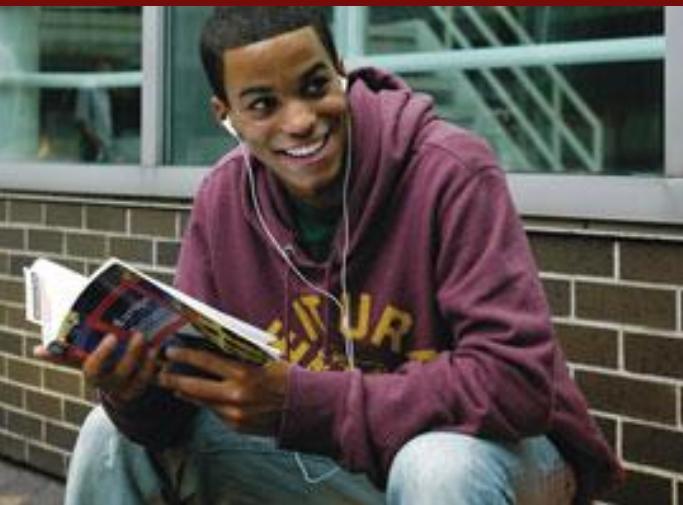




Linking BCSSE and NSSE Data to Investigate First-Year Engagement and Outcomes

Indiana University
Center for Postsecondary
Research



James S. Cole
BCSSE Project Manager

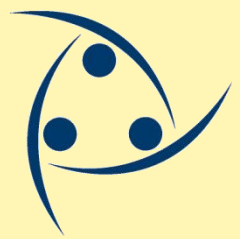
Jillian Kinzie
Associate Director





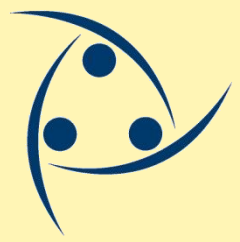
Overview

- Description of BCSSE & NSSE
- Administration & Reports
- Using BCSSE-NSSE Data
- Questions and Discussion



Description of BCSSE

Purpose of BCSSE is to measure entering first-year students' pre-college academic and co-curricular experiences, as well as their expectations and attitudes for participating in educationally purposeful activities during the first college year.



Survey Administration

Paper or Web

1. Paper group administration

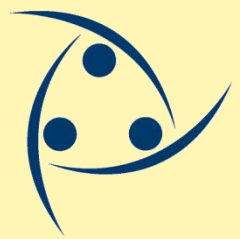
- During Orientation activities, etc.

2. Web group administration

- While students are in computer lab, etc.

3. Web email administration

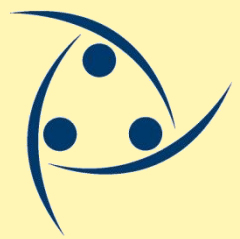
- Web link emailed to students



Description of BCSSE

There are 3 sections to the BCSSE survey

- 1) First section asks students about their high school experiences
- 2) Second section asks students about their expectations and beliefs regarding their first-year of college
- 3) The last section asks students about background characteristics.



Survey Content

High School Experiences

High School Experiences

1 Please write in the year you graduated from high school. (For example, "2010")

--	--	--	--

2 From which type of high school did you graduate? (Select only one.)

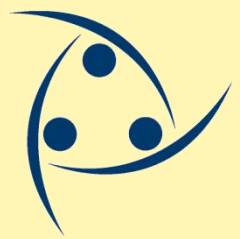
- | | |
|--|--|
| <input type="checkbox"/> Public | <input type="checkbox"/> Home school |
| <input type="checkbox"/> Private, religiously-affiliated | <input type="checkbox"/> Other (e.g., GED) |
| <input type="checkbox"/> Private, independent | |

3 What were most of your high school grades? (Select only one.)

- | | | |
|-----------------------------|-----------------------------|--|
| <input type="checkbox"/> A | <input type="checkbox"/> B | <input type="checkbox"/> C |
| <input type="checkbox"/> A- | <input type="checkbox"/> B- | <input type="checkbox"/> C- or lower |
| <input type="checkbox"/> B+ | <input type="checkbox"/> C+ | <input type="checkbox"/> Grades not used |

4 To date, in which of the following math classes did you earn a passing grade?

	Did not take	Passed	Did not pass
a. Algebra II	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Pre-Calculus/Trigonometry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Calculus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Probability or Statistics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

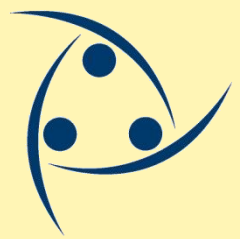


Survey Content

High School Experiences

9 During your last year of high school about how often did you do each of the following?

	Very often	Often	Some-times	Never
	▼	▼	▼	▼
a. Asked questions in class or contributed to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Made a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Came to class without completing readings or assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Discussed grades or assignments with a teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Worked with other students on projects during class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Worked with classmates outside of class to prepare class assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

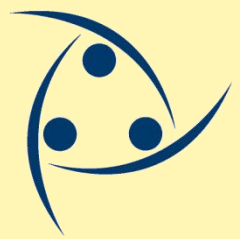


Survey Content

First-Year Expectations

14 During the coming school year, about how often do you expect to do each of the following?

	Very often	Often	Some- times	Never
	▼	▼	▼	▼
a. Ask questions in class or contribute to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Make a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Work on a paper or project that requires integrating ideas or information from various sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Work with other students on projects during class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Work with classmates outside of class to prepare class assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Survey Content

Many of these questions are designed to be matched with NSSE data.

BCSSE

8 During your last year of high school, about how many hours did you spend in a typical 7-day week doing each of the following?

- a. Preparing for class (studying, doing homework, rehearsing, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- b. Working for pay (before or after school, weekends)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- c. Participating in co-curricular activities (arts, clubs, athletics, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- d. Relaxing and socializing (watching TV, partying, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week

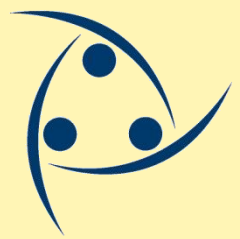
13 During the coming school year, about how many hours do you think you will spend in a typical 7-day week doing each of the following?

- a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- b. Working for pay on- or off- campus
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- c. Participating in co-curricular activities (organizations, campus organizations, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- d. Relaxing and socializing (watching TV, partying, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week

NSSE

9 About how many hours do you spend in a typical 7-day week doing each of the following?

- a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- b. Working for pay **on campus**
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- c. Working for pay **off campus**
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- d. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week
- e. Relaxing and socializing (watching TV, partying, etc.)
 0 1-5 6-10 11-15 16-20 21-25 26-30 More than 30
 Hours per week



Survey Content

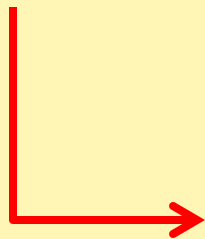
Expected First Year Experiences

BCSSE 

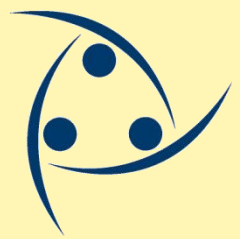
14 During the coming school year, about how often do you expect to do each of the following?

	Very often	Often	Some- times	Never
a. Ask questions in class or contribute to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Make a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NSSE 



	Very often	Often	Some- times	Never
a. Asked questions in class or contributed to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Made a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Survey Content

BCSSE Scales

High School Academic Engagement

Engagement in educationally relevant behaviors during the last year of high school.

Expected Academic Engagement

Expected engagement in educationally relevant behaviors during the first year of college.

Expected Academic Perseverance

Student certainty that they will persist in the face of academic adversity.

Expected Academic Difficulty

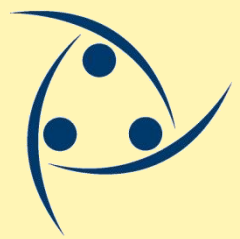
Expected academic difficulty during the first year of college.

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.



Survey Content & Admin.

Three reports are provided:

1. BCSSE Report (Summer/Fall 2010)
2. BCSSE Advising (Summer/Fall 2010)
3. BCSSE/NSSE report (Summer 2011)

BCSSE Report



BCSSE 2007 Engagement Item Frequency Distributions NSSEville State University

	<i>Variable</i>	<i>Response Options</i>	All Students		Gender				First Generation^a			
			NSSEville		Female		Male		Yes		No	
			<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>
d. Relaxing and socializing (watching TV, partying, etc.)	hsocial	0 hours per week	4	0%	4	0%	0	0%	3	1%	0	0%
		1-5 hours per week	254	18%	176	22%	75	12%	102	25%	128	14%
		6-10 hours per week	381	27%	237	29%	142	23%	114	28%	242	26%
		11-15 hours per week	332	23%	181	22%	147	24%	83	20%	229	25%
		16-20 hours per week	239	17%	138	17%	99	16%	62	15%	167	18%
		21-25 hours per week	112	8%	34	4%	76	12%	18	4%	84	9%
		26-30 hours per week	41	3%	23	3%	18	3%	11	3%	28	3%
		More than 30 hours per week	74	5%	17	2%	57	9%	17	4%	54	6%
		Total	1,437	100%	810	100%	614	100%	410	100%	932	100%

BCSSE Report



BCSSE 2007 Engagement Item Frequency Distributions NSSEville State University

	<i>Variable</i>	<i>Response Options</i>	All Students		Gender				First Generation^a			
			NSSEville		Female		Male		Yes		No	
			<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>
d. Relaxing and socializing (watching TV, partying, etc.)	hsocial	0 hours per week	4	0%	4	0%	0	0%	3	1%	0	0%
		1-5 hours per week	254	18%	176	22%	75	12%	102	25%	128	14%
		6-10 hours per week	381	27%	237	29%	142	23%	114	28%	242	26%
		11-15 hours per week	332	23%	181	22%	147	24%	83	20%	229	25%
		16-20 hours per week	239	17%	128	17%	90	16%	62	15%	167	18%
		21-25 hours per week	112	8%	34	4%	76	12%	18	4%	84	9%
		26-30 hours per week	41	3%	23	3%	18	3%	11	3%	28	3%
		More than 30 hours per week	74	5%	17	2%	57	9%	17	4%	54	6%
		Total	1,437	100%	810	100%	614	100%	410	100%	932	100%

BCSSE Report

**BCSSE 2007 Mean Scale Scores and Selected Student Comparisons
NSSEville State University**

Scale ^a	Variable	All Students NSSEville			Gender Comparisons				First Generation ^d Comparisons			
		Mean	SD	N	Means by Gender		Tests of mean differences		Means by First Generation		Tests of mean differences	
					Female	Male	Sig. ^b	Effect size ^c	Yes	No	Sig. ^b	Effect size ^c
High School Academic Engagement												
<i>Engagement in educationally relevant behaviors during high school</i>	HS_acad	5.31	1.35	1,440	5.48	5.09	***	.29	5.04	5.43	***	-.29
Expected First-Year Academic Engagement												
<i>Expected engagement in educationally relevant behaviors during the first-year of college</i>	Exp_acad	6.20	1.50	1,440	6.18	6.21		-.02	5.98	6.30	***	-.21

BCSSE Report

BCSSE 2007 Mean Scale Scores and Selected Student Comparisons NSSEville State University

Scale ^a	Variable	All Students NSSEville			Gender Comparisons				First Generation ^d Comparisons			
		Mean	SD	N	Means by Gender		Tests of mean differences		Means by First Generation		Tests of mean differences	
					Female	Male	Sig. ^b	Effect size ^c	Yes	No	Sig. ^b	Effect size ^c
High School Academic Engagement <i>Engagement in educationally relevant behaviors during high school</i>	HS_acad	5.31	1.35	1,440	5.48	5.09	***	.29	5.04	5.43	***	-.29
Expected First-Year Academic Engagement <i>Expected engagement in educationally relevant behaviors during the first-year of college</i>	Exp_acad	6.20	1.50	1,440	6.18	6.21		-.02	5.98	6.30	***	-.21

BCSSE Advising



Beginning College Survey of Student Engagement

Student Advising Report 2007-2008
NSSEville State University

Student Background

Student ID	123456789
Last name (first 3 letters)	MAR
Gender	Female
Home zip code	55555
Survey taken	While attending orientation
First generation student?	No

High School Experiences

High school grades	A-
High school type	Public

About how many hours did you spend in a typical 7-day week doing each of the following?

Preparing for class	6-10 hrs
Working for pay on- or off- campus	0 hrs
Participating in co-curricular activities	1-5 hrs
Relaxing or socializing	1-5 hrs

How difficult do you expect the following to be?

1 = Not at all difficult to 6 = Very Difficult

Learning course material	4
Managing your time	5
Paying for college expenses	3
Getting help with school work	2
Making new friends	1
Interacting with faculty	1

How certain are you that you will do the following?

1 = Not at all certain to 6 = Very certain

Study when there are other interesting things to do	4
Find additional information for assignments when you don't understand the material	6
Participate regularly in course discussions, even when you don't feel like it	6
Ask instructors for help when you struggle with course assignments	6
Finish something you have started when you encounter challenges	6
Stay positive, even when you do poorly on a test or assignment	6

BCSSE Advising



Beginning College Survey of Student Engagement

Student Advising Report 2007-2008
NSSEville State University

Student Background

Student ID	123456789
Last name (first 3 letters)	MAR
Gender	Female
Home zip code	55555
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High school grades	A-
High school type	Public

About how many hours did you spend in a typical 7-day week doing each of the following?

Preparing for class	6-10 hrs
Working for pay on- or off- campus	0 hrs
Participating in co-curricular activities	1-5 hrs
Relaxing or socializing	1-5 hrs

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1 = Not at all difficult to 6 = Very Difficult

Learning course material	4
Managing your time	5
Paying for college expenses	3
Getting help with school work	2
Making new friends	1
Interacting with faculty	1

How certain are you that you will do the following?

1 = Not at all certain to 6 = Very certain

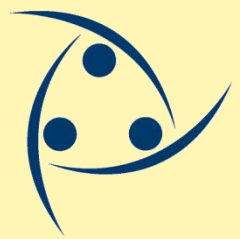
Study when there are other interesting things to do	4
Find additional information for assignments when you don't understand the material	6
Participate regularly in course discussions, even when you don't feel like it	6
Ask instructors for help when you struggle with course assignments	6
Finish something you have started when you encounter challenges	6
Stay positive, even when you do poorly on a test or assignment	6

BCSSE/NSSE Report

<i>How many hours in a typical 7-day week doing each of the following?</i>		BCSSE ¹				NSSE ²	
		High School		Expected FY		First Year	
		<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>
Preparing for class (studying, doing homework, rehearsing, etc.)	None	28	2	0	0	2	1
	1-10	904	63	154	11	166	42
	11-20	386	27	636	45	189	42
	More than 20	119	8	636	45	78	16
	Total	1,437	100	1,426	100	435	100
Participating in co-curricular activities (arts, clubs, athletics, etc.)	None	94	7	51	4	155	37
	1-10	474	33	748	52	176	40
	11-20	613	43	464	32	67	14
	More than 20	255	18	165	12	37	9
	Total	1,436	100	1,428	100	435	100
Working for pay	No	477	33	548	38	212	49
	Yes	961	67	879	62	223	51
	Total	1,438	100	1,427	100	435	100

BCSSE/NSSE Report

<i>How many hours in a typical 7-day week doing each of the following?</i>		BCSSE ¹				NSSE ²	
		High School		Expected FY		First Year	
		<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>
Preparing for class (studying, doing homework, rehearsing, etc.)	None	28	2	0	0	2	1
	1-10	904	63	154	11	166	42
	11-20	386	27	636	45	189	42
	More than 20	119	8	636	45	78	16
	Total	1,437	100	1,426	100	435	100
Participating in co-curricular activities (arts, clubs, athletics, etc.)	None	94	7	51	4	155	37
	1-10	474	33	748	52	176	40
	11-20	613	43	464	32	67	14
	More than 20	255	18	165	12	37	9
	Total	1,436	100	1,428	100	435	100
Working for pay	No	477	33	548	38	212	49
	Yes	961	67	879	62	223	51
	Total	1,438	100	1,427	100	435	100



A Campus Example

Using information contained in their reports, as well as the BCSSE and NSSE data file, here are a few things they found out about their the amount of hours per week their first-year students spent studying and preparing for class.



From the BCSSSE Report

They were surprised to find out that the majority of their incoming first-year class spent less than 11 hours per week preparing for class in high school.

8. During your last year of high school, about how many hours did you spend in a typical 7-day week doing each of the following?

Preparing for class (studying, doing homework, rehearsing, etc.)

0 hours per week	40	3%
1-5 hours per week	799	52%
6-10 hours per week	446	29%
11-15 hours per week	154	10%
16-20 hours per week	54	4%
21-25 hours per week	27	2%
26-30 hours per week	6	0%
More than 30 hours per week	9	1%
Total	1,535	100%

84%



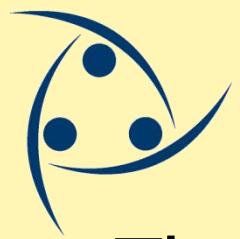
From the BCSSSE Report

However, they were pleased to find out that the majority of their incoming first-year class expected to spend at least 11 hours per week preparing for class.

13. During the coming school year, about how many hours do you think you will spend in a typical 7-day week doing each of the following?

Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	0 hours per week	4	0%
	1-5 hours per week	52	3%
	6-10 hours per week	276	18%
	11-15 hours per week	446	30%
	16-20 hours per week	379	25%
	21-25 hours per week	221	15%
	26-30 hours per week	77	5%
	More than 30 hours per week	49	3%
Total		1,504	100%

79%



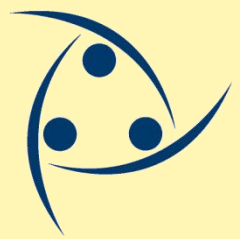
NSSE Report

They were moderately pleased though to find out that approximately 65% of their first-year class reported that they spent at least 11 hours per week preparing for class.

9. About how many hours do you spend in a typical 7-day week doing each of the following?

Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	0 hours per week	4	1%
	1-10 hours per week	153	34%
	11-20 hours per week	185	41%
	More than 20 hours per week	108	24%
	Total	450	100%

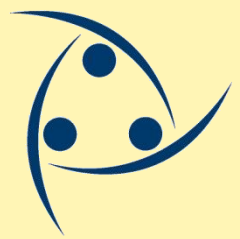
65%



Additional Analysis

However, this institution wanted to know more. According to many advisors on this campus, students did not spend as much time studying and preparing for class because they were overwhelmed and too busy.

So the institutional research office was asked to run additional analysis to further investigate.



Additional Analysis

Hours spent preparing/studying for class

10 hours or less: 35%

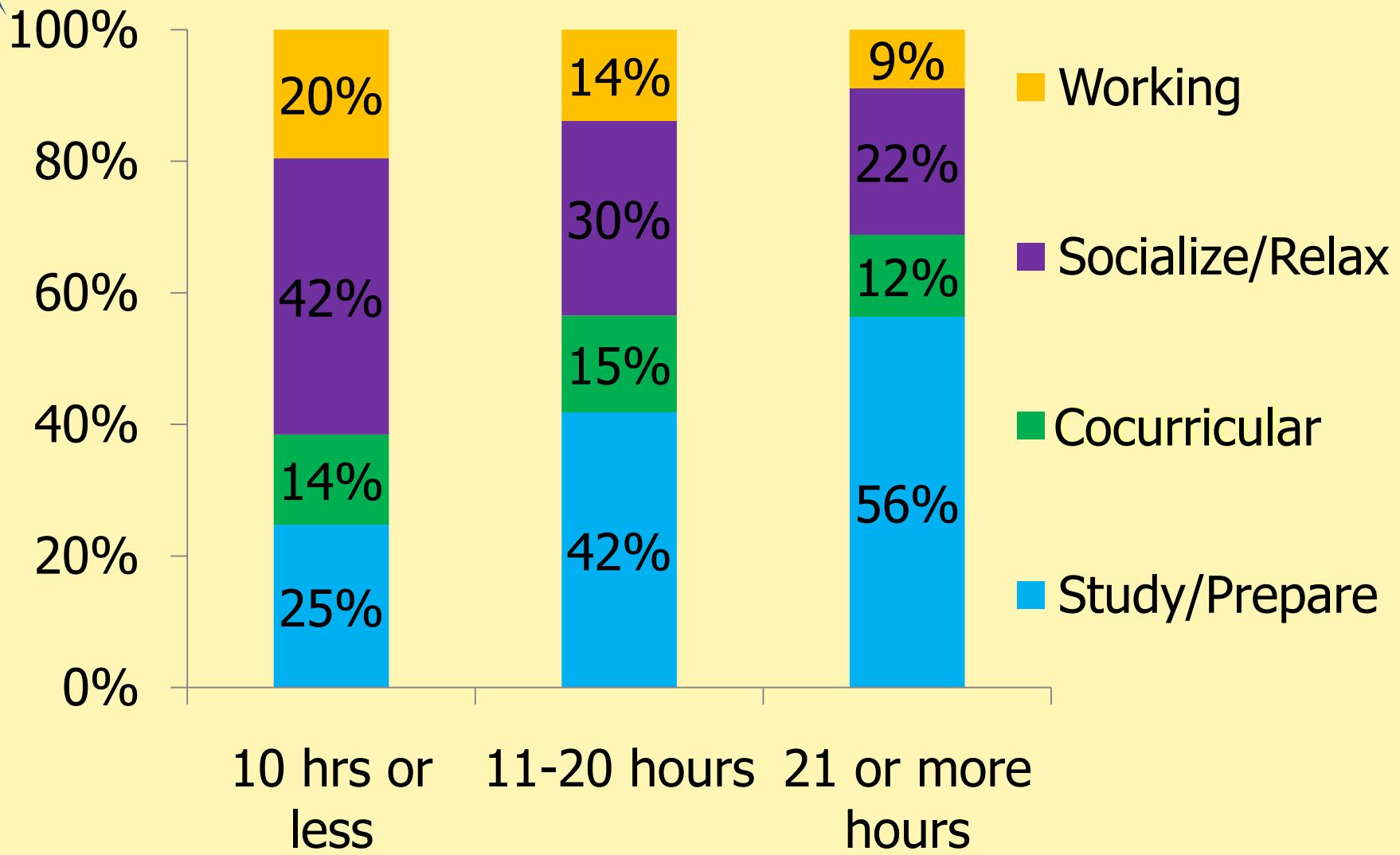
11-20 hours: 41%

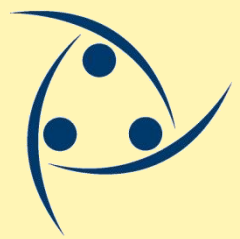
21 or more hours: 24%

Are the students spending 10 hours less proportionately spending more time doing other activities (e.g., working, cocurricular, etc)?



Percent Hours per Week in FY

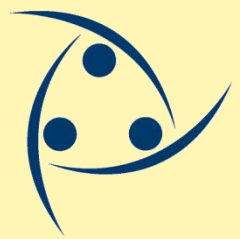




Additional Analysis

So, this institution now knows that many of the students not spending as much time studying are spending proportionately much more time socializing and relaxing.

There is a suggestion that this pattern of hours spent studying was no different for these students in high school. . .



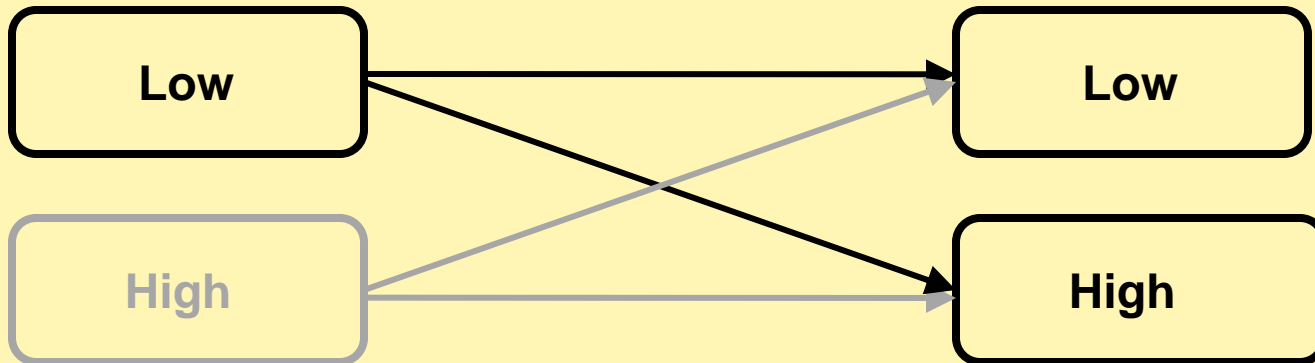
Many other examples. . .

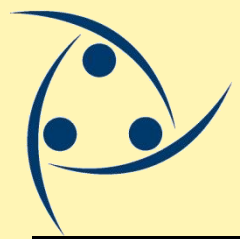
Many students enter our campuses at-risk for low engagement

You can use BCSSE-NSSE data to identify how these students behave differently.

High school engagement

First-Year engagement





What they did

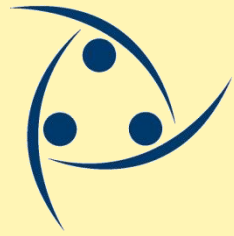
Activities (Often +Very often)	Lo-Lo	Lo-Hi	Diff.
Asked questions in class or contributed to class discuss.	29%	84%	55%
Made a class presentation	11%	66%	55%
Prepared two or more drafts of a paper or assignment before turning it in	36%	81%	45%
Worked with other students on projects DURING CLASS	17%	62%	45%
Worked with classmates OUTSIDE OF CLASS to prepare class assignments	19%	72%	53%
Discussed grades or assignments with an instructor	18%	81%	63%
Discussed ideas from your readings or classes with faculty members outside of class	3%	45%	41%
Discussed ideas from your readings or classes with others outside of class (students, family members, etc.)	27%	77%	50%
# assigned textbooks, books, or book-length packs of course readings	73%	91%	17%
# written papers/reports BETWEEN 5-19 PAGES	17%	41%	23%
# written papers/reports of FEWER THAN 5 PAGES	62%	88%	26%



What they did

Through orientation programs, emphasize with new FY students:

- The importance of hours devoted to studying
- The dangers of spending too much time socializing and relaxing
- The challenges they will face in the classroom
- The institution emphasizes academic excellence and there are support services available for all student who need them



Thank You

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&

Jillian Kinzie

Copies of the paper and PowerPoint can be found at:

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