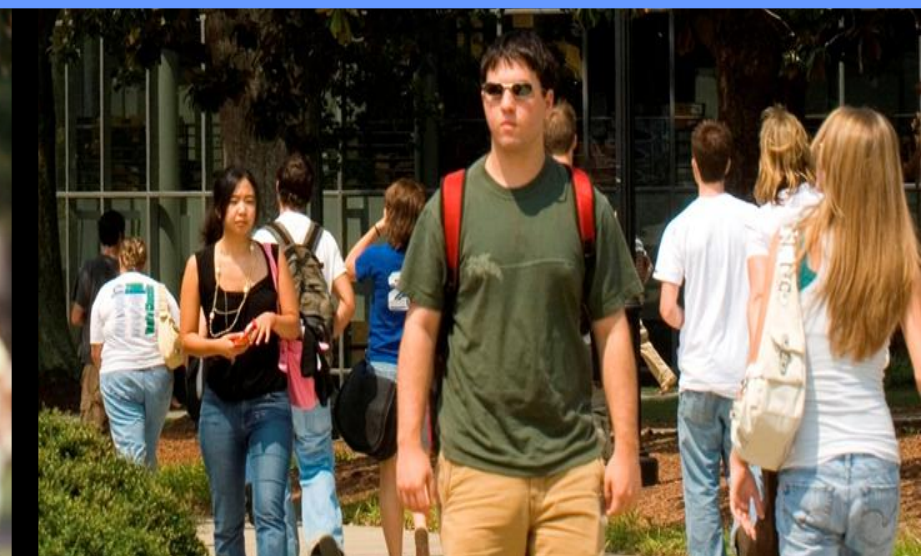


## Using BCSSE-NSSE Data to Investigate First-Year Engagement and Outcomes

Presented by:

James Cole, Ph.D.  
BCSSE Project Manager

Brian McGowan  
NSSE Project Associate





# Overview

Today we will cover:

- ❖ Brief description of the *Beginning College Survey of Student Engagement* (BCSSE) and the *National Survey of Student Engagement* (NSSE)
  - Purpose, survey content, administration, reports
- ❖ Describe an example of using BCSSE-NSSE data to examine learning community impact



# Purpose

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 Content

There are 3 sections to the BCSSE survey

- 1) First section asks students about their high school experiences (Q's 1 – 12)
- 2) Second section asks students about their expectations and beliefs regarding their first-year of college (Q's 13 – 18 & 21 – 23)
- 3) The last section asks students about background characteristics (Q 19, 20, 24 - 32)



# Administration

## Paper, Web, or Mixed Modes

1. Paper group administration
  - Orientation, Welcome Week, etc.
2. Web group administration
  - While students are in computer lab, etc.
3. Web email administration
  - Web link emailed to students



# Reports

Four reports are provided:

1. BCSSE Report (Summer/Fall 2010)
2. BCSSE Advising (Summer/Fall 2010)
3. Grand Frequencies and Means (Fall 2010)
  - a) Overall
  - b) Institution types
4. BCSSE/NSSE report (Summer 2011)



# Reports

## BCSSE Report



*BCSSE 2010 Frequency Distributions*

### BCSSE Frequencies and Means

Variable	Scale	Response Options	All Students		Gender				First Generation <sup>1</sup>				
			Count	%	Female		Male		Yes		No		
			Count	%	Count	%	Count	%	Count	%	Count	%	
8. During your <u>last year of high school</u> , about how many <u>hours</u> did you spend in a typical 7-day week doing each of the following?													
a. Preparing for class (studying, doing homework, rehearsing, etc.)	hacadpr	HSE	0 hours per week	30	2	9	1	20	4	12	2	15	2
			1-5 hours per week	559	37	322	35	234	41	245	41	275	34
			6-10 hours per week	422	28	261	28	159	28	169	28	228	28
			11-15 hours per week	239	16	154	17	84	15	90	15	136	17
			16-20 hours per week	134	9	93	10	41	7	49	8	77	10
			21-25 hours per week	63	4	45	5	18	3	21	3	39	5
			26-30 hours per week	30	2	23	3	7	1	9	2	19	2
			More than 30 hours per week	31	2	20	2	11	1	11	1	18	2
Total			1,509	100	927	100	572	100	594	100	807	100	



# Reports

## BCSSE Report



*BCSSE 2010 Frequency Distributions*

### BCSSE Frequencies and Means

Variable	Scale	Response Options	All Students		Gender				First Generation <sup>1</sup>				
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			26-30 hours per week	30	2	23	3	7	1	9	2	19	2
			More than 30 hours per week	31	2	20	2	11	1	11	1	18	2
			Total	1,509	100	927	100	572	100	594	100	807	100





# 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.



# Reports

## BCSSE Report



### BCSSE 2010 Mean Scale Scores and Selected Student Comparisons

#### BCSSE Frequencies and Means

BCSSE Scales <sup>a</sup>	Variable	All Students			Gender Comparisons				First-Generation <sup>d</sup> Comparisons			
		Mean	SD	N	Means		Tests of mean differences		Means		Tests of mean differences	
					Female	Male	Sig. <sup>e</sup>	Effect size <sup>f</sup>	FG	Non-FG	Sig. <sup>e</sup>	Effect size <sup>f</sup>
<b>High School Academic Engagement (HSE)</b> <i>Engagement in educationally relevant behaviors during the last year of high school.</i>	HS_acad	5.38	1.46	1,509	5.52	5.17	***	.24	6.95	5.34	***	.97
<b>Expected Academic Engagement (EAE)</b> <i>Expected engagement in educationally relevant behaviors during the first year of college.</i>	Exp_acad	6.11	1.63	1,509	5.17	6.18	***	-.65	5.34	5.42	***	-.05



# Reports

## BCSSE Report



*BCSSE 2010 Mean Scale Scores and Selected Student Comparisons*

### BCSSE Frequencies and Means

BCSSE Scales <sup>a</sup>	Variable	All Students			Gender Comparisons				First-Generation <sup>d</sup> Comparisons			
		Mean	SD	N	Means		Tests of mean differences		Means		Tests of mean differences	
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# Reports

## BCSSE Report



*BCSSE 2010 Mean Scale Scores and Selected Student Comparisons*

### BCSSE Frequencies and Means

BCSSE Scales <sup>a</sup>	Variable	All Students			Gender Comparisons				First-Generation <sup>d</sup> Comparisons			
		Mean	SD	N	Means		Tests of mean differences		Means		Tests of mean differences	
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# Reports

## 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	1-5 hrs
Working for pay	6-10 hrs
Participating in co-curricular activities	6-10 hrs
Relaxing and socializing	16-20 hrs

*About how much reading and writing did you do in high school?*

*1 = None to 5 = Very much*

Assigned reading	4
Writing short papers or reports	5
Writing longer papers or reports	5

## Expected College Experiences

Expected college grades	A
Intends to graduate from institution	Yes
Highest degree anticipated	Master's

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

Preparing for class	26-30 hrs
Working for pay on- or off- campus	1-5 hrs
Participating in co-curricular activities	16-20 hrs
Relaxing or socializing	11-15 hrs

## The BCSSE Student Advising Report

*The Beginning College Survey of Student Engagement Student Advising Report is an individualized report designed to help you understand how your students' expectations about college activities and learning might affect their actual first-year experiences. This report uses information from the recently completed BCSSE survey.*

# Reports

## 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	1-5 hrs
Working for pay	6-10 hrs
Participating in co-curricular activities	6-10 hrs
Relaxing and socializing	16-20 hrs

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*1 = None to 5 = Very much*

Assigned reading	4
Writing short papers or reports	5
Writing longer papers or reports	5

## Expected College Experiences

Expected college grades	A
Intends to graduate from institution	Yes
Highest degree anticipated	Master's

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

Preparing for class	26-30 hrs
Working for pay on- or off- campus	1-5 hrs
Participating in co-curricular activities	16-20 hrs
Relaxing or socializing	11-15 hrs

## The BCSSE Student Advising Report

The BCSSE is not an achievement test, but rather a survey that can help you to better advise your students so they can get the most out of their college experience. The BCSSE Student Advising Report communicates the activities and experiences each student expects from their college experience.



# Very Brief Description NSSE

## National Survey of Student Engagement (NSSE)

- ❖ Collects data from first-year and senior students near the end of the academic year regarding their academic engagement.
- ❖ NSSE collects data regarding "good practices" in undergraduate education that reflect behaviors by students and institutions that are associated with desired outcomes of college.



# Very Brief Description NSSE

## National Survey of Student Engagement (NSSE)

- ❖ **Level of Academic Challenge**
  - Time spend preparing for class (Q9a)
- ❖ **Active and Collaborative Learning**
  - Worked with other students on projects during class (Q1g)
- ❖ **Student-Faculty Interaction**
  - Talked about career plans with a faculty member (Q1o)
- ❖ **Enriching Educational Experiences**
  - Talking with students of a different race or ethnicity (Q1u)
- ❖ **Supportive Campus Environment.**
  - Campus provides support you need to help you succeed academically (Q10b)





# 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

BCSSE



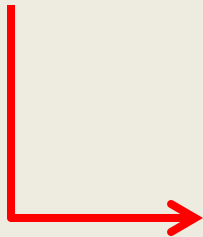
**14** During the coming school year, about how often do you expect to do each of the following?

	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"/>





# Reports

## BCSSE/NSSE Report

<i>How many hours in a typical 7-day week doing each of the following?</i>		BCSSE <sup>1</sup>				NSSE <sup>2</sup>	
		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



# Reports

## BCSSE/NSSE Report

<i>How many hours in a typical 7-day week doing each of the following?</i>		BCSSE <sup>1</sup>				NSSE <sup>2</sup>	
		High School		Expected FY		First Year	
		<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>
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# Reports

## BCSSE/NSSE Report

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# Reports

## BCSSE/NSSE Report

<i>How many hours in a typical 7-day week doing each of the following?</i>		BCSSE <sup>1</sup>				NSSE <sup>2</sup>	
		High School		Expected FY		First Year	
		<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>	<i>Count</i>	<i>%</i>
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# Learning Communities

NSSEville State is in its fourth year of offering a learning community (LC). Two important goals of the learning community program is to provide additional support and resources for those students that display low confidence in their academic abilities and for those students who expect a difficult academic transition during their first year.



# LC Students and BCSSE Data

		Learning Com	
		No	Yes
High school grades	A	58%	62%
	B	42%	38%
Read on their own	S +	66%	69%
	N/VL	34%	31%
High school studying	6 +	62%	63%
	0-5	38%	37%
Intention to graduate	Yes	86%	91%
First generation	Yes	31%	35%
Ethnicity	Asian	5%	4%
	Black	7%	10%
	Caucasian	74%	78%
	Hispanic	6%	5%
	Other	8%	3%

Students in LC were slightly more likely to report A's in high school, read more, and intend to graduate. Interestingly, also slightly more likely to be first generation.





# LC Students and BCSSE Data

		Learning Com	
		No	Yes
High School Engagement	Mean	5.3	5.7 <sup>1</sup>
Expected FY Engagement	Mean	6.1	6.5
Expected Academic Perseverance	Mean	7.1	7.2
Expected Academic Difficulty	Mean	4.9	5.0
Perceived Academic Preparation	Mean	6.9	7.0
Importance of Campus Support	Mean	7.4	7.6

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<sup>1</sup>  $p < .05$



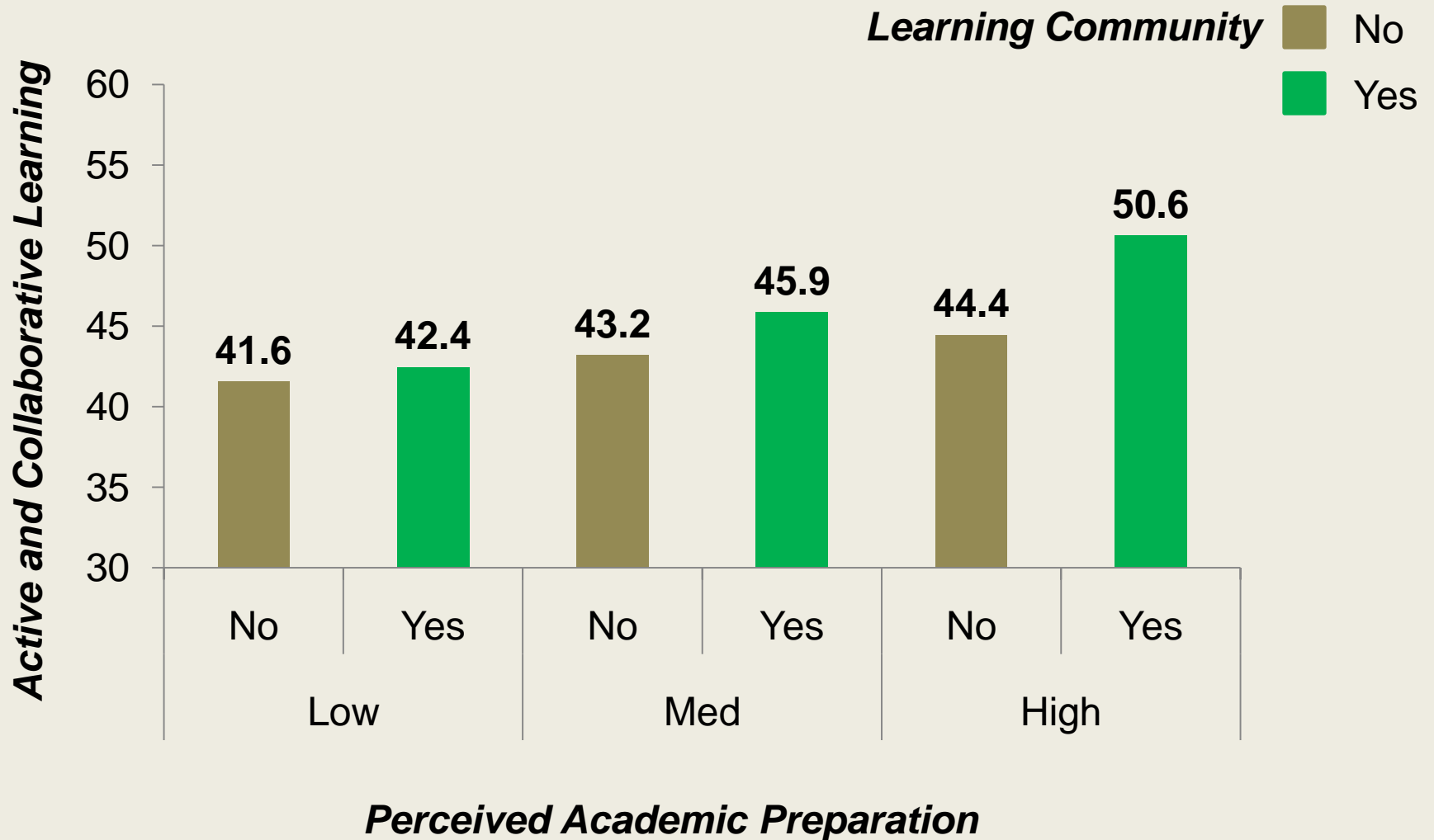
# LC Students and BCSSE/NSSE Data

Since the Director is particularly interested in students with low academic confidence and/or those who expect to experience a difficult academic transition, they used two scale measures from BCSSE: Expected Academic Difficulty and Perceived Academic Preparation.

To identify those with low confidence or high expectations for transition difficulties, students were group into categories of low, medium, and high for each measure.

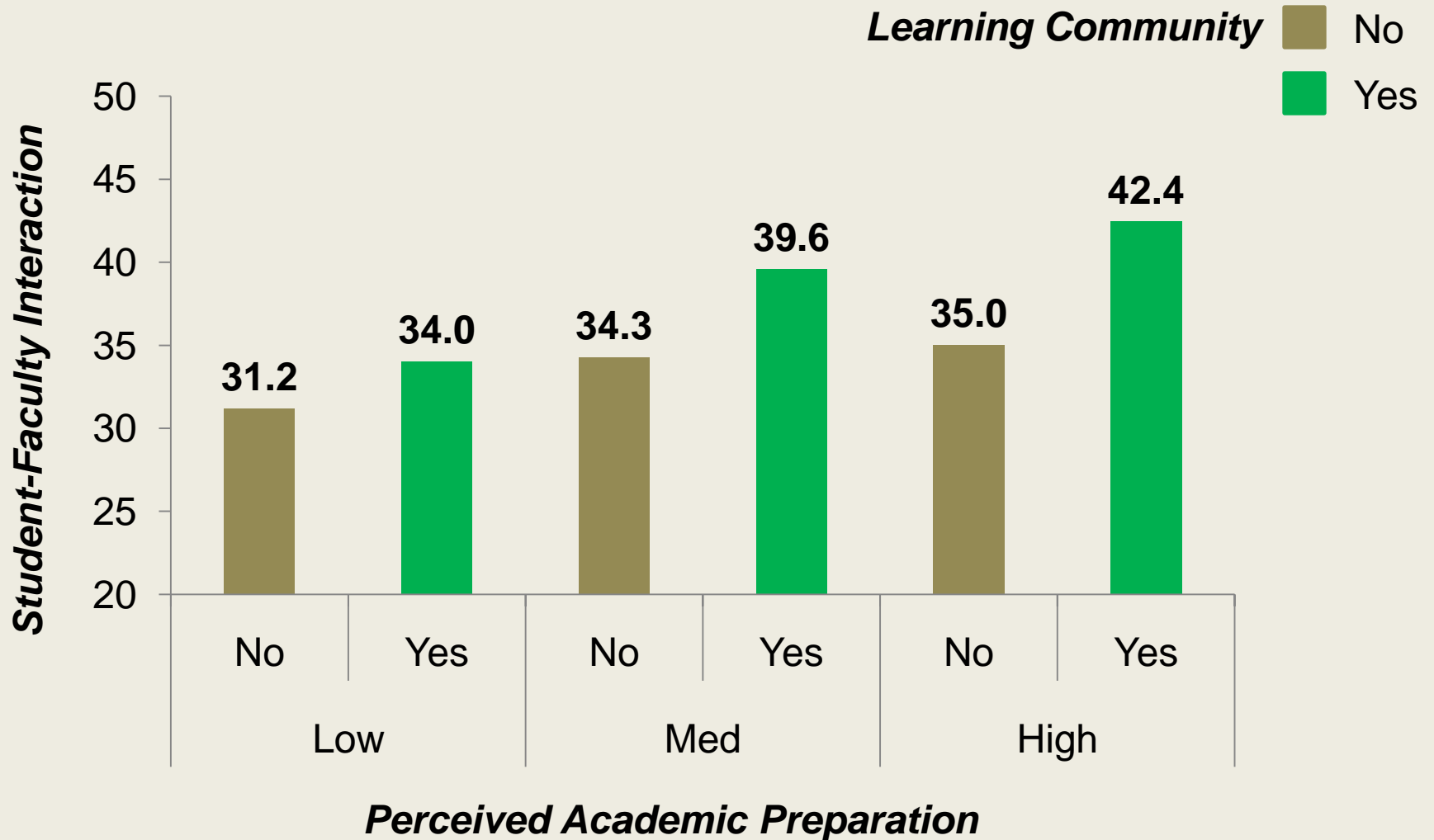


# LC Students and BCSSE/NSSE Data



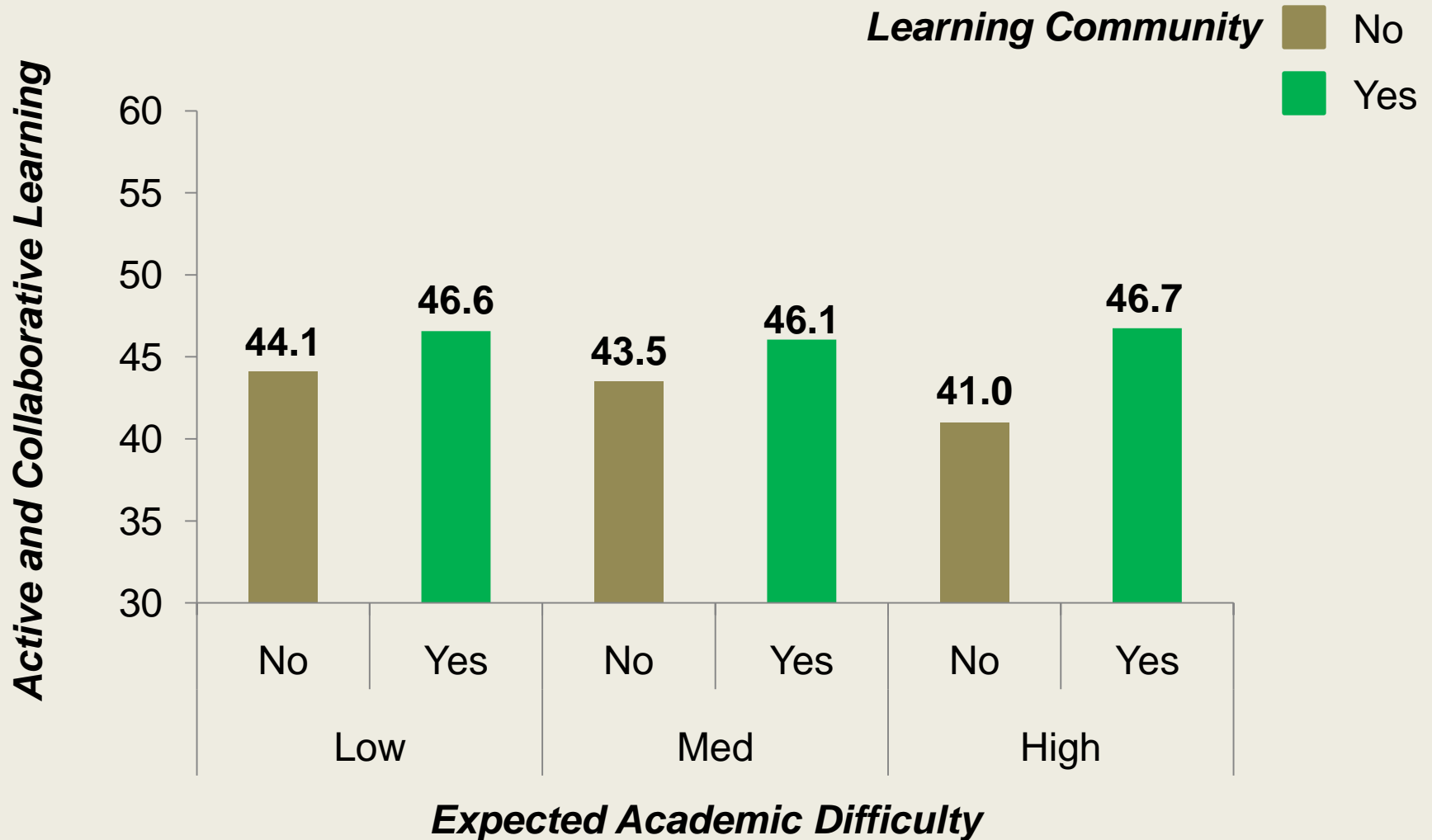


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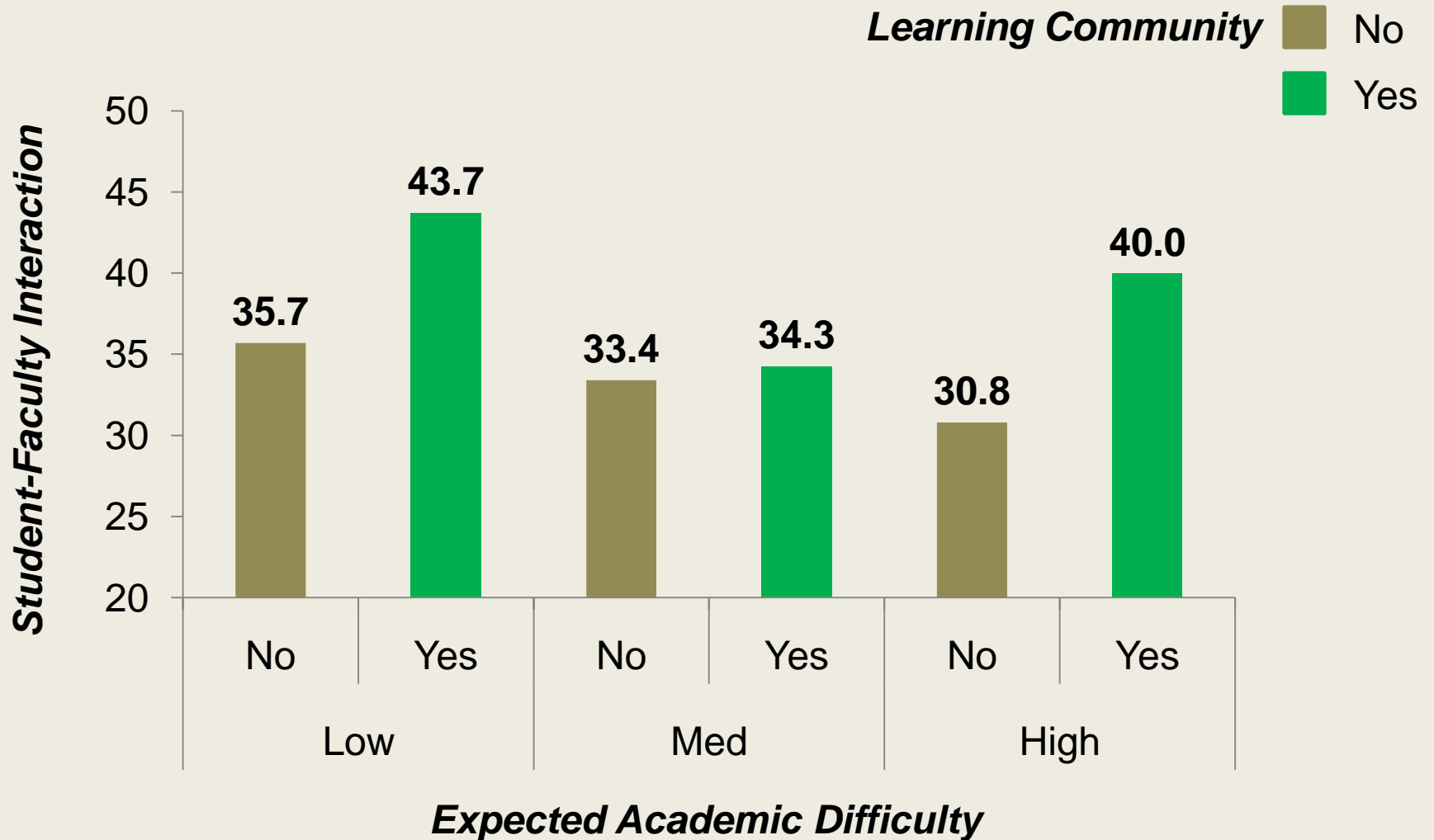


# LC Students and BCSSE/NSSE Data





# LC Students and BCSSE/NSSE Data





# LC Students and BCSSE/NSSE Data

Two primary conclusions:

- ❖ One is that students with higher levels of academic self confidence appear to be benefiting the most from participation in a learning community compared to their peers with low confidence.
- ❖ Second, students who expect higher degree of academic difficulty seem to be benefiting from learning communities.

Any discussion, questions, or comments?





# Thank you!

Copy of this and past presentations can be found at:

<http://bcsse.iub.edu/pubs.cfm>

Additional BCSSE information can be found at:

<http://bcsse.iub.edu/>

Feel free to contact me with any  
questions regarding BCSSE & NSSE.

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