Using BCSSE and NSSE Data to Investigate College Readiness

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Overview

Today we will cover:

- Brief description of the *Beginning College Survey of Student Engagement* (BCSSE)
  - Purpose, survey content, administration, reports
- Engagement Readiness of First-Year Students
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

High School experiences include:
- Writing
- Reading
- Studying
- Learning Strategies
- Quantitative Reasoning
- Reflective Learning

First-Year Expectations include:
- Writing
- Reading
- Studying
- Student-Faculty Interactions
- Discussion with Diverse Others
- Collaborative Learning
- Perceived Academic Preparedness
- Importance of Supportive Environment
### Survey Content

#### Comparing BCSSE 2013 with NSSE 2013

<table>
<thead>
<tr>
<th>Item</th>
<th>BCSSE 2013</th>
<th>NSSE 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>High School</td>
<td>Expected FY</td>
</tr>
<tr>
<td>Writing</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Reading</td>
<td>X</td>
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<tr>
<td>Hours/Week</td>
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<td>Challenge</td>
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<td>Quant Reasoning</td>
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<td>Learning Strategies</td>
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<td>Reflective Learning</td>
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<td>Collaborative Learning</td>
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<td>Percieved Acad Preparedness</td>
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<td>Supportive Environment</td>
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<tr>
<td>Self-Reported Grades</td>
<td>X</td>
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<tr>
<td>Prepare two or more drafts of paper</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Come to class without completing reading</td>
<td>X</td>
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</table>
# Survey Content

## High School Experiences

### Question 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, reading, doing homework, etc.)

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<th>Hours per week</th>
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### Question 9

During **your last year of high school**, of the time you spent preparing for class in a typical 7-day week, about how many hours were on assigned reading?

<table>
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<tr>
<th>Hours per week</th>
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</tbody>
</table>
### High School Experiences

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

<table>
<thead>
<tr>
<th></th>
<th>Very often</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
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</thead>
<tbody>
<tr>
<td>a. Come to class without completing readings or assignments</td>
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<tr>
<td>b. Prepared two or more drafts of a paper or assignment before turning it in</td>
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<tr>
<td>c. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)</td>
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<tr>
<td>d. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)</td>
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<tr>
<td>e. Evaluated what others have concluded from numerical information</td>
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<td>f. Identified key information from reading assignments</td>
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<tr>
<td>g. Reviewed your notes after class</td>
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<tr>
<td>h. Summarized what you learned in class or from course materials</td>
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</tbody>
</table>
First-Year Expectations

14. During the coming school year, of the time you expect to spend preparing for class in a typical 7-day week, about how many hours will be on assigned reading?

- [ ] 0
- [ ] 1-5
- [ ] 6-10
- [ ] 11-15
- [ ] 16-20
- [ ] 21-25
- [ ] 26-30
- [ ] More than 30

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

- a. Ask another student to help you understand course material
- b. Explain course material to one or more students
- c. Prepare for exams by discussing or working through course material with other students
- d. Work with other students on course projects or assignments
- e. Talk about career plans with a faculty member
- f. Work with a faculty member on activities other than coursework (committees, student groups, etc.)
First-Year Expectations

24. What do you expect most of your grades will be during the coming year? (Select only one.)
   - A
   - A-
   - B
   - B-
   - C
   - C-
   - C- or lower
   - Grades not used

25. Do you expect to graduate from this institution?
   - Yes
   - No
   - Uncertain

26. Do you know what your major will be?
   - No
   - Yes, specify:

27. Are you (or will you be) a full-time student this fall term?
   - Yes
   - No

28. How many of your close friends will attend this college during the coming year?
   - None
   - 1
   - 2
   - 3
   - 4 or more

29. This institution was your:
   - First choice
   - Second choice
   - Third choice
   - Fourth choice
   - Fifth choice or lower
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
Four reports are provided:

1. BCSSE Report (Summer/Fall 2013)
2. BCSSE Advising (Summer/Fall 2013)
3. Grand Frequencies and Means (Fall 2013)
   a) Overall
   b) Institution types
4. BCSSE/NSSE report (Summer 2014)
Readiness to be Engaged

College Readiness

Traditional indicators of college readiness mainly focus on subject-specific high school academic preparation (Conley, 2007).

- student performance on math portions of standardized tests are used as an indicator for readiness to participate college-level quantitative study (ACT, 2010)
- remedial courses students take after entering college are often used to indicate that many students are not ready for college-level coursework.

However, these indicators do not reflect the students’ readiness to be meaningful engaged.

- Just as prior academic achievement is an indicator of readiness for academic study in college, prior high school engagement is an indicator of readiness to be engaged in college.

We know that engagement is linked with retention and graduation.

- DiRamio study and 6 year graduation rates (AERA, 2011)
Questions . . .

If a student has never experienced high levels of engagement in high school, is it reasonable that they will all of a sudden be highly engaged in college?

Do they know what it means to be highly engaged if they never experienced it?

Would you expect a first-year student to do well in college algebra if they struggled with high school algebra?
Consider this . . . .

Readiness to be Engaged

- Exp FY
- End of FY
- HS

Hours studying per week:
- 5hrs or fewer
- 6-10 hrs
- 11hrs or more

- 36% (5hrs or fewer)
- 14% (6-10 hrs)
- 24% (11hrs or more)
- 3% (End of FY)
- 28% (Exp FY)
- 14% (HS)
- 36% (End of FY)
- 83% (Exp FY)
- 62% (HS)

Percentage of students engaging in study hours per week.
Readiness to be Engaged

Consider this . . . . .

<table>
<thead>
<tr>
<th>Hours studying per week</th>
<th>Exp FY</th>
<th>End of FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>5hrs or fewer</td>
<td>36%</td>
<td>83%</td>
</tr>
<tr>
<td>6-10 hrs</td>
<td>28%</td>
<td>62%</td>
</tr>
<tr>
<td>11hrs or more</td>
<td>14%</td>
<td>36%</td>
</tr>
</tbody>
</table>
Readiness to be Engaged

Have serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values.
Readiness to be Engaged

Have serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values

- Never: 13%
- Sometimes: 33%
- Often: 27%
- Very Often: 27%

Conversations with students who are different
Readiness to be Engaged

“Hours per week studying” and “conversations with students” are just two examples. However, they highlights the points that student high school behaviors are at times resilient and often persist into the first year of college.

Should we have high expectations for studying? Of course, but we need to be realistic that very few students are going to start spending twice as much time studying in college as they did in high school.

We can think of academic engagement behaviors as learned. . . .
Readiness to be Engaged

Engagement behaviors can be scaffolded.

**Scaffolding:** “A support mechanism, provided by a more competent individual, that helps a learner successfully perform a task within his or her zone of proximal development” (Ormrod, 2006).

With regard to hours studying, we cannot “perform” the task for the student. However, we can help students to recognize the time, effort, and cost associated with studying, within the context of their past behaviors.
Readiness to be Engaged

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Whether it is studying or other types of engagement, the “costs” might mean that a student:

- spends less time on other more enjoyable activities
- does not go home every weekend
- rearranges their schedule
- takes a chance, does something they are not used to doing (e.g., speak up in class)
- etc. . . .
Readiness to be Engaged

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Think of the various forms of academic engagement we expect of students.

- Interaction with faculty
- Interaction with diverse student body
- Engagement in a totally new environment that is for most part unstructured (compared to high school).

Not all students are well-equipped to know how to be highly engaged in all these activities.
Readiness to be Engaged

Given that there is tendency toward behavioral consistency (Funder, & Colvin, 1991), is it realistic that we actually can influence student behaviors?
Readiness to be Engaged

Given that there is a tendency toward behavioral consistency (Funder, & Colvin, 1991), is it realistic that we actually can influence student behaviors?

Using several years of BCSSE-NSSE data, we know the answer is **YES!**

The following are examples using the high school academic engagement scale from BCSSE and four benchmarks from NSSE.

Benchmarks include:
- Engagement in academically challenging activities (LAC)
- Engagement in active and collaborative learning (ACL)
- Interaction with faculty (SFI)

Also, Supportive Campus Environment
Readiness to be Engaged

Academic Challenge

- SCE Low
- SCE Low-Med
- SCE Med-High
- SCE High

High School Engagement

0-1 2 3 4 5 6 7 8 9-10
Readiness to be Engaged

Active and Collaborative Learning

- SCE Low
- SCE Low-Med
- SCE Med-High
- SCE High

High School Engagement

0-1 2 3 4 5 6 7 8 9-10
Readiness to be Engaged

Student-Faculty Interaction

- SCE Low
- SCE Low-Med
- SCE Med-High
- SCE High

High School Engagement
There is a good deal of behavioral consistency between high school and first year of college.

Understanding the past behaviors of your incoming FY students can help you to better align programs that are beneficial to them.

Use BCSSE and NSSE data to assess FY programmatic impacts on *changes* in student engagement.

Campus programs can have a positive, beneficial influence on student behavior

• However, it is an up hill battle.
• Don’t expect dramatic changes.
• Student’s can change, but it is often incremental.
Readiness to be Engaged

Questions?

Comments?
Thank you!

Copy of this and past presentations can be found at:

http://nsse.iub.edu/html/pubs.cfm

Additional BCSSE information can be found at:
http://bcsse.iub.edu/

Feel free to contact me with any questions regarding BCSSE.

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