Helping US Become Knowledge-Able About Student Engagement

Derek Herrmann & Ryan Smith
University Assessment Services
Background
Dimensions of Learning & Assessment

Achievement
- ACCUMULATION OF LEARNING
  - Outcomes: GRE, NCLEX, RD exam, etc.

Learning
- CHANGE IN BEHAVIOR, THINKING, ETC.
  - Outcomes: Advanced skills, critical thinking, etc.

Engagement
- PROCESSES THAT SUPPORT LEARNING
  - Processes: Time studying, tutoring, interaction with faculty, services, etc.

Persistence
- CONSEQUENCES OF LEARNING
  - Outputs: Graduation, retention, satisfaction, utilization, etc.
What is student engagement?

- Amount of time and effort put into academic and co-curricular activities
- Ways institution allocates resources and organizes opportunities for students to participate in activities linked to student learning

From the National Survey of Student Engagement (NSSE) website, [http://nsse.iub.edu/](http://nsse.iub.edu/)
Background

What is student engagement?
- Amount of time and effort put into academic and co-curricular activities
- Ways institution allocates resources and organizes opportunities for students to participate in activities linked to student learning

How can information on student engagement be used?
- Identify areas of excellence
- Identify opportunities for improvement
- Used in discussions related to teaching and learning

From the National Survey of Student Engagement (NSSE) website, http://nsse.iub.edu/
Background

- **Beginning College Survey of Student Engagement (BCSSE)**
  - Assesses*
    - The time and effort entering, first-year students devoted to educationally purposeful activities in high school and expect to devote to during their first year of college
    - What these entering first-year students expect their institutions to provide them regarding opportunities and emphasis
  - Compliments the National Survey of Student Engagement (NSSE) and the Faculty Survey of Student Engagement (FSSE)

* From the Beginning College Survey of Student Engagement (BCSSE) website, [http://bcsse.iub.edu/](http://bcsse.iub.edu/)
Background

- **Beginning College Survey of Student Engagement (BCSSE)**
  - 2012 Administration at ISU
    - During Preview sessions
    - 2,016 incoming students responded
      - 65% of all students who attended Preview
      - 89% of sampled students
# Background

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>BCSSE</td>
<td>NSSE</td>
<td>FSSE</td>
<td>BCSSE</td>
<td>NSSE</td>
<td>FSSE</td>
<td>BCSSE</td>
<td>NSSE</td>
</tr>
<tr>
<td>Student Cohort 1</td>
<td>B4</td>
<td>FY</td>
<td></td>
<td>SR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Cohort 2</td>
<td></td>
<td></td>
<td></td>
<td>B4</td>
<td>FY</td>
<td></td>
<td>SR</td>
<td></td>
</tr>
<tr>
<td>Student Cohort 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B4</td>
<td>FY</td>
<td></td>
</tr>
</tbody>
</table>
# Background

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>BCSSE</td>
<td>NSSE</td>
<td>FSSE</td>
<td>BCSSE</td>
<td>NSSE</td>
<td>FSSE</td>
<td>BCSSE</td>
<td>NSSE</td>
</tr>
<tr>
<td>Student Cohort 1</td>
<td>B4</td>
<td>FY</td>
<td></td>
<td></td>
<td>SR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Cohort 2</td>
<td></td>
<td></td>
<td>B4</td>
<td>FY</td>
<td></td>
<td></td>
<td>SR</td>
<td></td>
</tr>
<tr>
<td>Student Cohort 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B4</td>
<td>FY</td>
</tr>
</tbody>
</table>
## Background

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>BCSSE</td>
<td>NSSE</td>
<td>FSSE</td>
<td>BCSSE</td>
<td>NSSE</td>
<td>FSSE</td>
<td>BCSSE</td>
<td>NSSE</td>
</tr>
<tr>
<td>Student Cohort 1</td>
<td>B4</td>
<td>FY</td>
<td></td>
<td>SR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Cohort 2</td>
<td></td>
<td></td>
<td>B4</td>
<td>FY</td>
<td></td>
<td>SR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Cohort 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B4</td>
<td>FY</td>
</tr>
</tbody>
</table>
Findings
## BCSSE Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected Academic Difficulty</td>
<td>5.0</td>
<td>1.6</td>
</tr>
<tr>
<td>High School Academic Engagement</td>
<td>5.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Expected Academic Engagement</td>
<td>6.0</td>
<td>1.6</td>
</tr>
<tr>
<td>Expected Academic Perseverance</td>
<td>7.2</td>
<td>1.5</td>
</tr>
<tr>
<td>Importance of Campus Environment</td>
<td>7.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Perceived Academic Preparation</td>
<td>7.4</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Range: 0 - 10
Expected Academic Difficulty

Details
• 4 items
• 6-point scale (higher score indicates more difficulty)

Highest means
• Managing your time ($M = 4.2; SD = 1.3$)
• Learning course material ($M = 3.9; SD = 1.0$)

Lowest means
• Interacting with faculty ($M = 2.8; SD = 1.2$)
• Getting help with school work ($M = 3.1; SD = 1.1$)
BCSSE Scales

- High School Academic Engagement
  - Details
    - 12 items
    - 4-point scale (higher score indicates more often)
  - Highest means
    - Asked questions in class or contributed to class discussions ($M = 3.1; SD = 0.8$)
    - Worked with other students on projects during class ($M = 2.9; SD = 0.7$)
High School Academic Engagement

- Highest means
  - Asked questions in class or contributed to class discussions ($M = 3.1; SD = 0.8$)
  - Worked with other students on projects during class ($M = 2.9; SD = 0.7$)

- Lowest means
  - Discussed ideas from your readings or classes with teachers outside of class ($M = 2.0; SD = 0.9$)
  - Worked with classmates outside of class to prepare class assignments ($M = 2.3; SD = 0.7$)
BCSSE Scales

- Expected Academic Engagement
  - Details
    - 8 items
    - 4-point scale (higher score indicates more often)
  - Highest means
    - Work with classmates outside of class to prepare class assignments ($M = 3.1; SD = 0.7$)
    - Ask questions in class or contribute to class discussions ($M = 3.0; SD = 0.7$)
BCSSE Scales

- Expected Academic Engagement
  - Highest means
    - Work with classmates outside of class to prepare class assignments ($M = 3.1; SD = 0.7$)
    - Ask questions in class or contribute to class discussions ($M = 3.0; SD = 0.7$)
  - Lowest means
    - Discuss ideas from your readings or classes with faculty members outside of class ($M = 2.6; SD = 0.8$)
    - Discuss ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.) ($M = 2.7; SD = 0.8$)
BCSSE Scales

- Expected Academic Perseverance
  - Details
    - 6 items
    - 6-point scale (higher score indicates more certainty)
  - Highest means
    - Finish something you have started when you encounter challenges ($M = 5.0$; $SD = 0.9$)
    - Ask instructors for help when you struggle with course assignments ($M = 4.8$; $SD = 1.1$)
BCSSE Scales

- Expected Academic Perseverance
  - Highest means
    - Finish something you have started when you encounter challenges \((M = 5.0; SD = 0.9)\)
    - Ask instructors for help when you struggle with course assignments \((M = 4.8; SD = 1.1)\)
  - Lowest means
    - Participate regularly in course discussions even when you don’t feel like it \((M = 4.1; SD = 1.1)\)
    - Study when there are other interesting things to do \((M = 4.2; SD = 1.1)\)
**BCSSE Scales**

- **Importance of Campus Environment**
  - **Details**
    - 6 items
    - 6-point scale (higher score indicates more importance)
  - **Highest means**
    - Support to help you succeed academically
      \( M = 5.3; \ SD = 0.9 \)
    - Opportunities to attend campus events and activities
      \( M = 4.9; \ SD = 1.1 \)
BCSSE Scales

- Importance of Campus Environment
  - Highest means
    - Support to help you succeed academically ($M = 5.3; SD = 0.9$)
    - Opportunities to attend campus events and activities ($M = 4.9; SD = 1.1$)
  - Lowest means
    - Assistance coping with your non-academic responsibilities (work, family, etc.) ($M = 4.2; SD = 1.3$)
    - Support to help you thrive socially ($M = 4.4; SD = 1.3$)
BCSSE Scales

- Perceived Academic Preparation
  - Details
    - 7 items
    - 6-point scale (higher score indicates more prepared)
  - Highest means
    - Work effectively with others ($M = 5.2; SD = 0.9$)
    - Learn effectively on your own ($M = 4.9; SD = 1.0$)
  - Lowest means
    - Analyze math or quantitative problems ($M = 4.2; SD = 1.3$)
    - Use computing and information technology ($M = 4.4; SD = 1.1$)
During your last year of high school, about how many hours did you spend in a typical 7-day week preparing for class (studying, doing homework, rehearsing, etc.)?
During the coming school year, about how many hours do you think you will spend in a typical 7-day week preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)?

- 0 hours per week: 0.1%
- 1-5 hours per week: 2.1%
- 6-10 hours per week: 12.6%
- 11-15 hours per week: 28.1%
- 16-20 hours per week: 29.0%
- 21-25 hours per week: 19.4%
- 26-30 hours per week: 5.9%
- More than 30 hours per week: 2.9%
Last Year vs. Expected First Year

LY median = 6-10 hours per week
EFY median = 16-20 hours per week
During your last year of high school, about how many hours did you spend in a typical 7-day week participating in co-curricular activities (arts, clubs, athletics, etc.)?
During the coming school year, about how many hours do you think you will spend in a typical 7-day week participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural activities)?
Last Year vs. Expected First Year

LY median = 11-15 hours per week
EFY median = 6-10 hours per week
During your last year of high school, about how many hours did you spend in a typical 7-day week working for pay (before or after school, weekends)?

- 0 hours per week: 29.0%
- 1-5 hours per week: 13.1%
- 6-10 hours per week: 13.8%
- 11-15 hours per week: 16.6%
- 16-20 hours per week: 14.0%
- 21-25 hours per week: 8.3%
- 26-30 hours per week: 3.8%
- More than 30 hours per week: 1.5%
During the coming school year, about how many hours do you think you will spend in a typical 7-day week working for pay on- or off-campus?
Last Year vs. Expected First Year

LY median = 6-10 hours per week
EFY median = 6-10 hours per week
During your last year of high school, about how many hours did you spend in a typical 7-day week relaxing and socializing (watching TV, partying, etc.)?
During the coming school year, about how many hours do you think you will spend in a typical 7-day week relaxing and socializing (watching TV, partying, etc.)?
Last Year vs. Expected First Year

LY median = 11-15 hours per week
EFY median = 11-15 hours per week
Discussion
Summary

- BCSSE Scales
  - Lowest average score – Expected Academic Difficulty
  - Highest average score – Perceived Academic Preparation
- Most difficulty expected
  - Managing time
  - Learning course material
Discussion

- Summary
  - Academic engagement
    - Most often
      - Ask questions in class or contribute to class discussions
      - Work with other students (LY during class; EFY outside of class)
    - Least often – discussing ideas with others outside of class
Discussion

Summary

- Most certain
  - Finish something when encounter challenges
  - Ask instructors for help
- Most important
  - Support to help achieve academic success
  - Opportunities to attend campus events and activities
Summary

- Most prepared
  - Work effectively with others
  - Learn effectively on their own
- Last Year vs. Expected First Year
  - Expected to increase – Preparing for class
  - Expected to decrease – Participating in co-curricular activities
  - No change expected
    - Working for pay
    - Relaxing and socializing
Discussion

Conclusions

- Time management skills are a concern
- Lower expectations to discuss ideas with others outside of class
- Confident in asking instructors for help
- Having academic support and campus activities are important
- Feel prepared to work and learn with others
Discussion

- Implications
  - Emphasize scheduling time for assignments
  - Encourage discussions of course materials
  - Be available to provide assistance
  - Provide information on resources and support
  - Encourage learning individually and in groups
Discussion

- Limitations
  - Sample size
  - Mean differences

- Future directions
  - Continue to disseminate information
  - Look at student engagement longitudinally with the NSSE
Questions?
Comments?
Concerns?
Want more information?

- Mr. Derek Herrmann, UAS Coordinator
  - djherrm@ilstu.edu
  - 309.438.7325

- Dr. Ryan Smith, UAS Director
  - rlsmith@ilstu.edu
  - 309.438.2135

- http://assessment.illinoisstate.edu/