Life without Ranking: How to Use NSSE Student-Level Comparison Reports for Institutional Advancement

Pu-Shih Daniel Chen
NSSE Research Analyst
Indiana University
Overview

- Assessment vs. Ranking
- What is NSSE?
- What can NSSE do for you?
- NSSE Benchmark Comparisons Report
- Executive Summary Report
What is Your Purpose of Assessment?

- Meet Accreditation Requirements
- Improve Student Learning and Student Engagement
- Show Off for Marketing Purpose
- Increase Institutional Prestige
- Meet State or Federal Requirements
- This is what I do, otherwise I will lose my job
Purpose of Assessment

Jacobi, Astin, and Ayala (1987):

- Provide information about student’s change and development
- Establish accountability for external agencies
- Evaluate programs, to analyze cost-effectiveness, and to set goals

Purpose of Assessment

- Davis (1989):
  - Formative Assessment
    - Improvement or development of activities, programs, products, and people
  - Summative Assessment
    - Accountability, resource allocation, selection, placement, certification, accreditation

The Assessment Loop

1. Set goals, ask questions
2. Gather evidence
3. Interpret findings
4. Use for improvement

Ranking

- U.S. News and World Report
  - Wealth
  - Fame
  - Exclusivity

- Summative Assessment

Focus Assessment on What Matters in College:  *Student Engagement*

Because individual effort and involvement are the critical determinants of college impact, institutions should focus on the ways they can shape their academic, interpersonal, and extracurricular offerings to encourage student engagement.

What is NSSE?

An annual snapshot of student participation in programs and activities that institutions provide for their learning and personal development.

- Results provide an estimate of how undergraduates spend their time and what they gain from attending college.

- National Survey of Student Engagement items represent empirically confirmed ‘good practices’; they reflect behaviors associated with desired outcomes of college.

- The time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development.

- Data belongs to the institution.
College student survey that assesses the extent to which first-year students and seniors engage in educational practices associated with high levels of learning and development.
NSSE Institutional Report

- Overview
- Institutional data
- Item averages and response percentages
- Respondent characteristics
- First-year students and seniors
- Comparisons by selected peers, Carnegie peers, and all NSSE schools
- Information video
- Using NSSE Data
- Accreditation toolkit
- Benchmarks
Using NSSE

- NSSE data can be used in many different ways
- The context of your institutions will decide how you use NSSE results
- Using NSSE Benchmark, Scales, and Individual Items
- Break down your NSSE data by gender, major, or enrollment status
- Link NSSE data with student information
Benchmark Report

Level of Academic Challenge

Benchmark Mean Comparisons

<table>
<thead>
<tr>
<th>NSSEville State</th>
<th>Selected Peers</th>
<th>Master’s</th>
<th>NSSE 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Mean</td>
<td>Sig*</td>
<td>Effect</td>
</tr>
<tr>
<td>First-Year</td>
<td>53.0</td>
<td>.24</td>
<td>51.6</td>
</tr>
<tr>
<td>Seniors</td>
<td>56.9</td>
<td>.14</td>
<td>56.0</td>
</tr>
</tbody>
</table>

Level of Academic Challenge Items

- Challenging intellectual and creative work is central to student learning and collegiate quality. Colleges and universities promote high levels of student achievement by emphasizing the importance of academic effort and setting high expectations for student performance.
- Preparing for class (studying, reading, writing, thinking, etc., related to academic program)
- Number of assigned readings, books, or book-length pieces of course readings
- Number of written papers or reports of 20 pages or more; number of written papers or reports of between 5 and 19 pages; and number of written papers or reports of fewer than 5 pages
- Conserved emphasis on the academic elements of an idea, experience, or theory
- Conserved emphasis on the synthesis and organizing of ideas, information, or experiences into new, more complex interpretations and relationships
- Conserved emphasis on the making of judgments about the value of information, arguments, or methods
- Conserved emphasis on the application of theories or concepts to practical problems or in new situations
- Conserved emphasis on the ability to understand, evaluate, and analyze
- Conserved emphasis on the ability to think critically and evaluate evidence
- Conserved emphasis on the ability to communicate effectively

National Survey of Student Engagement

NSSE 2005 Benchmark Report
Comparisons with Highly Engaging Institutions
NSSEville State University

First-Year Students

<table>
<thead>
<tr>
<th>NSSEville State</th>
<th>NSSE 2005 Top 60%</th>
<th>NSSE 2005 Top 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC</td>
<td>53.0</td>
<td>56.0 *** -24</td>
</tr>
<tr>
<td>ACL</td>
<td>42.5</td>
<td>46.3 *** -24</td>
</tr>
<tr>
<td>SFI</td>
<td>35.2</td>
<td>37.9 *** -15</td>
</tr>
<tr>
<td>EEE</td>
<td>28.7</td>
<td>30.4 *** -14</td>
</tr>
<tr>
<td>SCE</td>
<td>59.9</td>
<td>64.5 *** -26</td>
</tr>
<tr>
<td>LAC</td>
<td>56.9</td>
<td>59.5 *** -24</td>
</tr>
<tr>
<td>ACL</td>
<td>33.5</td>
<td>35.1 ** -10</td>
</tr>
<tr>
<td>SFI</td>
<td>45.9</td>
<td>48.7 *** -18</td>
</tr>
<tr>
<td>EEE</td>
<td>43.4</td>
<td>47.8 *** -18</td>
</tr>
<tr>
<td>SCE</td>
<td>58.2</td>
<td>62.5 *** -27</td>
</tr>
</tbody>
</table>

Level of Academic Challenge

NSSE 2005 Benchmark Report
Detailed Benchmark Statistics and Effect Sizes
NSSEville State University

First-Year Students
NSSE Benchmarks and Scales

- Deep Learning Scales
  - Higher Order Learning
  - Integrative Learning
  - Reflective Learning

- Gain Scales
  - Gain in Practical Competence
  - Gain in Personal and Social Development
  - Gain in General Education
NSSE Benchmarks and Scales

- Satisfaction Scales
  - Overall Satisfaction
  - Satisfaction and Opinions of Campus Relationships
- Psychometric Properties
- SPSS syntax
Benchmark Report and Executive Summary

- What can the benchmark scores tell you?
  - The “average” students of your institution
  - Comparisons between your institution and peers
  - Effect Size

### National Survey of Student Engagement

#### NSSE 2006 Benchmark Comparisons

**NSSEville State University**

**Level of Academic Challenge (LAC)**

### Benchmark Comparisons

<table>
<thead>
<tr>
<th>Class</th>
<th>NSSEville State</th>
<th>Selected Peers</th>
<th>Carnegie Peers</th>
<th>NSSE 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Year</td>
<td>52.3</td>
<td>51.6</td>
<td>50.4 *</td>
<td>.14</td>
</tr>
<tr>
<td>Senior</td>
<td>55.8</td>
<td>55.9</td>
<td>55.6</td>
<td>55.8</td>
</tr>
</tbody>
</table>
A Tale of Three Schools

- Three NSSE Institutions
  - All three institutions are private liberal arts universities
  - Predominantly White Institutions
  - Enrollment: 500, 3,000, and 7,000
  - The Same EEE mean score: 48.8

- What kind of conclusion would you make from these facts?
# Benchmark Distributions

## NSSE 2006 Benchmark Comparisons
**Detailed Statistics and Effect Sizes**
**NSSEville State University**

## First-Year Students

### Mean Statistics

<table>
<thead>
<tr>
<th>Level of Academic Challenge (LAC)</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSSEville State</td>
<td>285</td>
<td>52.3</td>
<td>13.8</td>
<td>.8</td>
</tr>
<tr>
<td>Selected Peers</td>
<td>5,854</td>
<td>51.6</td>
<td>13.1</td>
<td>.2</td>
</tr>
<tr>
<td>Carnegie Peers</td>
<td>6,600</td>
<td>50.4</td>
<td>13.5</td>
<td>.2</td>
</tr>
<tr>
<td>NSSE 2006</td>
<td>120,444</td>
<td>51.8</td>
<td>13.4</td>
<td>.0</td>
</tr>
<tr>
<td>Top 50%</td>
<td>38,442</td>
<td>55.8</td>
<td>12.9</td>
<td>.1</td>
</tr>
<tr>
<td>Top 10%</td>
<td>5,824</td>
<td>60.5</td>
<td>12.2</td>
<td>.2</td>
</tr>
</tbody>
</table>

### Distribution Statistics

<table>
<thead>
<tr>
<th>Percentiles</th>
<th>5</th>
<th>25</th>
<th>50</th>
<th>75</th>
<th>95</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSSEville State</td>
<td>33</td>
<td>43</td>
<td>52</td>
<td>62</td>
<td>74</td>
</tr>
<tr>
<td>Selected Peers</td>
<td>31</td>
<td>43</td>
<td>51</td>
<td>60</td>
<td>73</td>
</tr>
<tr>
<td>Carnegie Peers</td>
<td>29</td>
<td>41</td>
<td>51</td>
<td>60</td>
<td>73</td>
</tr>
<tr>
<td>NSSE 2006</td>
<td>30</td>
<td>43</td>
<td>52</td>
<td>61</td>
<td>74</td>
</tr>
<tr>
<td>Top 50%</td>
<td>34</td>
<td>47</td>
<td>56</td>
<td>65</td>
<td>77</td>
</tr>
<tr>
<td>Top 10%</td>
<td>40</td>
<td>52</td>
<td>60</td>
<td>69</td>
<td>80</td>
</tr>
</tbody>
</table>

### Reference Group Comparison Statistics

<table>
<thead>
<tr>
<th>Mean</th>
<th>SE</th>
<th>Sig.</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>.7</td>
<td>.8</td>
<td>.375</td>
<td>.05</td>
</tr>
<tr>
<td>1.8</td>
<td>.8</td>
<td>.024</td>
<td>.14</td>
</tr>
<tr>
<td>.5</td>
<td>.8</td>
<td>.509</td>
<td>.04</td>
</tr>
<tr>
<td>-3.5</td>
<td>.8</td>
<td>.000</td>
<td>-.27</td>
</tr>
<tr>
<td>-8.2</td>
<td>.8</td>
<td>.000</td>
<td>-.67</td>
</tr>
</tbody>
</table>
Look Behind the Average Students

- You miss the individual differences when you only look at the mean score
- Distribution Statistics can help you look at your institution as a whole
- Link your NSSE data with other student information to identify the population of less engaged
- Work out action plans to improve student engagement
Executive Summary Report

- Respondent Characteristics
- Benchmarks of Effective Educational Practice
- NSSE 2006 Item Comparisons
  - Highest Performing Areas
  - Lowest Performing Areas
Contact Us

- For more information about NSSE or related Surveys, please visit:

  http://nsse.iub.edu

Pu-Shih Daniel Chen, Ph.D.
NSSE Research Analyst
(812) 856-1434
E-mail: pdchen@indiana.edu