

NOW WHAT?

A Facilitator's Guide for Using NSSE Data



Jillian Kinzie

NASPA International
Assessment and Retention
Conference – St. Louis

June 8, 2007

Agenda



- ♦ Introductions – who has NSSE data?
- ♦ NSSE brief introduction
- ♦ Managing assessment information and results
- ♦ Dealing with skeptics on my campus
- ♦ Data quality issues
- ♦ One NSSE Application: **Retention**
- ♦ The Facilitator's Guide in Action
 - ♦ Sharing your data
 - ♦ Acting on your data

What is NSSE?



- ♦ A survey that provides 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.
 - ♦ NSSE items represent empirically confirmed 'good practices'; they reflect behaviors associated with desired outcomes of college.

NSSE Overview



- ♦ The "NSSElings"
 - ♦ The Faculty Survey of Student Engagement (2003)
 - ♦ The Beginning College Survey of Student Engagement (2004)
- ♦ Additional Surveys
 - ♦ The Law Student Survey of Student Engagement
 - ♦ The College Student Experiences Questionnaire
 - ♦ The College Student Expectations Questionnaire
 - ♦ The High School Survey of Student Engagement*
 - ♦ The Community College Survey of Student Engagement*
- ♦ *Not administered by the Center for Postsecondary Research

Core Survey: NSSE

- ♦ Research based on effective educational practices
- ♦ Designed and tested for high validity and reliability
- ♦ Relatively stable over time
- ♦ High credibility of self-reported data
- ♦ Over 275,000 students at 600 institutions annually

National Survey of Student Engagement 2007
The College Student Report

How many hours per week do you spend studying? (Please include time spent on assignments, reading, and class preparation.)

Response	Frequency
0	<input type="checkbox"/>
1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>
6	<input type="checkbox"/>
7	<input type="checkbox"/>
8	<input type="checkbox"/>
9	<input type="checkbox"/>
10	<input type="checkbox"/>
11	<input type="checkbox"/>
12	<input type="checkbox"/>
13	<input type="checkbox"/>
14	<input type="checkbox"/>
15	<input type="checkbox"/>
16	<input type="checkbox"/>
17	<input type="checkbox"/>
18	<input type="checkbox"/>
19	<input type="checkbox"/>
20	<input type="checkbox"/>
21	<input type="checkbox"/>
22	<input type="checkbox"/>
23	<input type="checkbox"/>
24	<input type="checkbox"/>
25	<input type="checkbox"/>
26	<input type="checkbox"/>
27	<input type="checkbox"/>
28	<input type="checkbox"/>
29	<input type="checkbox"/>
30	<input type="checkbox"/>
31	<input type="checkbox"/>
32	<input type="checkbox"/>
33	<input type="checkbox"/>
34	<input type="checkbox"/>
35	<input type="checkbox"/>
36	<input type="checkbox"/>
37	<input type="checkbox"/>
38	<input type="checkbox"/>
39	<input type="checkbox"/>
40	<input type="checkbox"/>
41	<input type="checkbox"/>
42	<input type="checkbox"/>
43	<input type="checkbox"/>
44	<input type="checkbox"/>
45	<input type="checkbox"/>
46	<input type="checkbox"/>
47	<input type="checkbox"/>
48	<input type="checkbox"/>
49	<input type="checkbox"/>
50	<input type="checkbox"/>

Questions to answer with NSSE results

- ♦ How many hours per week do first-year students spend studying? Do women study more than men?
- ♦ What % of seniors work with faculty members on activities other than coursework (activities, committees)? Does this differ by major?
- ♦ What % of FY and SR spend **0 hours** in co-curricular involvements? Is this more than at peer institutions?
- ♦ Do FY students work more frequently with classmates on assignments outside of class than their counterparts at peer institutions?

Questions to answer with NSSE results

- Do NSSE results match our mission?
- Are we meeting our expectations for having a supportive campus environment?
- Since implementing a new multicultural education initiative and expanding diversity programming, has our score on the diversity scale changed?
- Are FY who withdraw from the institution different in terms of engagement than students who are retained?

Sample NSSE results: Frequencies & Mean comparisons

- Frequency Comparisons: About how many hours do you spend in a typical 7-day week participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.)

(1=0 hrs/wk, 2=1-5 hrs/wk, 3=6-10 hrs/wk, 4=11-15 hrs/wk, 5=16-20 hrs/wk, 6=21-25 hrs/wk, 7=26-30 hrs/wk, 8=more than 30 hrs/wk)

	NSSEville State	Selected Peers	Carnegie Peers	NSSE 2006	NSSEville State	Selected Peers	Carnegie Peers	NSSE 2006
COCU 0 hrs/wk	190 61%	2539 43%	3,440 32% #	43%	170 56%	2558 46%	3,341 52%	50,704 47%

0 Hours = 61% FY vs. 56% seniors compared to 43% and 46% at Select Peer Institutions

Sample NSSE results: Frequencies & Mean comparisons

- Mean Comparisons:

Bench mark	Class	NSSEville State compared with:			
		NSSEville State	Selected Peers	Carnegie Peers	NSSE 2006
Academic and Intellectual Experiences					
		Mean ^a	Mean ^a Sig ^b Sig ^c	Mean ^a Sig ^b Sig ^c	Mean ^a Sig ^b Sig ^c
<i>the following? 1=never, 2=sometimes, 3=often, 4=very often</i>					
g.	Worked with classmates outside of class to prepare class assignments	ACL	FY 2.11 2.34 *** -.27	2.33 *** -.24	2.36 *** -.28
		SR	2.52 2.70 ** -.20	2.65 *	2.75 *** -.26
h.	Worked with faculty members on activities other than coursework (committees, orientation, student life activities, etc.)	SFI	FY 1.47 1.55	1.59 ** -.14	1.56
		SR	1.83 1.83	1.85	1.81

Sample NSSE Results: Benchmarks

Supportive Campus Environment (SCE)

Benchmark Comparisons

Class	NSSEville State compared with:			
	NSSEville State	Selected Peers	Carnegie Peers	NSSE 2006
First-Year	Mean ^a 60.9	Mean ^a 57.8 ** Sig ^b .17	Mean ^a 59.4	Mean ^a 59.1
Senior	59.7	55.8 ** .21	59.4	56.6 * .16

First Year Students

Using NSSE Data

- Problem Identification - results point to things institutions can do something about - almost immediately
- Mobilize Action
- Context Setting - paint a picture of the institution
- Evidence of outcomes & processes
- Refocus conversation about collegiate quality
- Helps inform decision-making
- Provides lexicon for talking about collegiate quality in an understandable, meaningful way

Acting on NSSE Data

I COULD SIT HERE DOING NOTHING.

OR I COULD IMPLEMENT A BOLD QUALITY INITIATIVE WITH THE HELP OF MY TALENTED AND ENERGETIC COWORKERS.

I CRACK ME UP.

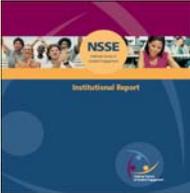
© 1996 United Feature Syndicate, Inc.(NYC)

Where do I start?

1. Start with your campus concerns, then go to the data
 - a. What burning questions do you have about your students?
 - b. What are the hot topics on your campus?
 - c. How can these data feed you with information on those topics?
2. How are you stacking up in terms of NSSE benchmarks, and educational practices of interest to your campus?

Getting to Know NSSE Data

- ◆ Respondent Characteristics
- ◆ Comparative data [National, Carnegie, Selected Peers]
 - ◆ Means Comparison
 - ◆ Frequency Distribution
 - ◆ Benchmark Data
- ◆ Data File



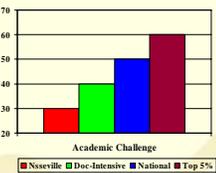
Know your data

What do these data indicate? What surprised you?

With whom might you share these results?

What might you want to communicate?

What implications do you see for assessment and retention?



Category	Score
Nssseville	30
Doc-Intensive	40
National	50
Top 5%	60

How do I deal with skeptics?

Skeptics tend to ask about the following:

- ◆ Why are we administering this survey?
- ◆ Validity and reliability
- ◆ What is the research foundation?
- ◆ Others?

“These results aren’t true!”

“This survey is not appropriate for OUR students”

Assessment Strategies *Why?*

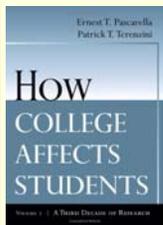
- ◆ “The institutional attitude should encourage organizational constituents to ask – about all policies, programs, and procedures – ‘What is our source of evidence for that assertion?’” (Wolfe & Harris, 1994, p. 276).
- ◆ “Examine, share, and act on assessment findings” (Palomba & Banta, 1999, p. 14)

Wolff, R.A. & Harris, O.A. (1994). Using Assessment to Develop a Culture of Evidence (pp. 271–288). In: D. Halpern, Ed. *Changing College Classrooms: New Teaching and Learning Strategies for an Increasingly Complex World*. San Francisco: Jossey-Bass.

Palomba, C. A., & Banta, T. W. (1999). *Assessment essentials: Planning, implementing, and improving assessment in higher education*. San Francisco: Jossey-Bass.

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

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*.



Pascarella & Terenzini, 2005, p. 602



How do I deal with skeptics?

Skeptics tend to ask about the following:

- ◆ Why are we administering this survey?
- ◆ **Validity and reliability**
- ◆ What is the research foundation?
- ◆ Others?



Validity of Self-Reported Data

- ◆ Self-reported data is valid if five conditions are met:
 1. Information is known to respondents
 2. Questions are phrased clearly & unambiguously
 3. Questions refer to recent activities
 4. Respondents think the questions merit a serious & thoughtful response
 5. Answering the questions does not threaten or embarrass students, violate their privacy, or encourage them to respond in socially-desirable ways
- ◆ NSSE was intentionally designed to satisfy these five conditions



Does the instrument yield valid information?

- ◆ Survey items...
 - ◆ Are clearly worded
 - ◆ Are well-defined
 - ◆ Have high content and construct validity
 - ◆ Relationships exist between items that are consistent with objective measures and other research
 - ◆ Responses are normally distributed
 - ◆ Patterns of responses are consistent both within and across major fields and institutions



Data Quality

- ◆ Random sampling from similar population types
- ◆ Response rate
 - ◆ 39% in 2006
- ◆ Sampling error
 - ◆ An estimate of the margin likely to contain your "true" score, for example:
 - ◆ If 60% of your students reply "very often" and the sampling error is $\pm 5\%$, it is likely that the true value is between 55% and 65%
 - ◆ More respondents --> smaller sampling error



How do I deal with skeptics?

Skeptics tend to ask about the following:

- ◆ Why are we administering this survey?
- ◆ Validity and reliability
- ◆ **What is the research foundation?**
- ◆ Others?



Research Foundation

- ◆ Student Engagement: based on the work of George Kuh and C. Robert Pace
- ◆ Current exemplars:
 - ◆ *Student Success in College: Creating Conditions that Matter* (Project DEEP)
 - ◆ *Assessing Conditions to Enhance Educational Effectiveness: The Inventory for Student Engagement and Success*



Communicating your Results

- ◆ It's your call on how to do this!
- ◆ Sample PowerPoint presentation in binder
- ◆ Focus groups
 - ◆ Faculty
 - ◆ Students
- ◆ **Facilitator's guide** can help you get organized



Sharing NSSE Results...Stimulating Conversation on Campus

"NSSE is a great way to stimulate reflection and debate about what we do more and less well, and why. For us it's proving an exciting and enlivening tool for self-reflection and self-improvement."

--Michael McPherson, President of The Spencer Foundation (former President of Macalester College)



Communicating Results - INTERNAL

Internal Sharing of NSSE 2005 Results	%
President	81
Faculty	74
Administrative Staff	74
Department Chairs	64
Academic Advisors	49
Governing Board	35
Students	31
Other (web site, fact book, etc.)	18



Communicating Results - EXTERNAL

External Sharing of NSSE 2005 Results	%
Accreditation Agencies	34
No External Disclosure	24
Web Site	22
Other	18
State Agencies	14
Media	13
Prospective Students	11
Parents	11
Alumni	10



Using your Data

- ◆ Benchmarking
 - ◆ Normative approach
 - ◆ Criterion approach
- ◆ Accreditation Preparation (see the Toolkit in your binder or on our Web site)
- ◆ Link to institutional data
- ◆ Link to other survey data



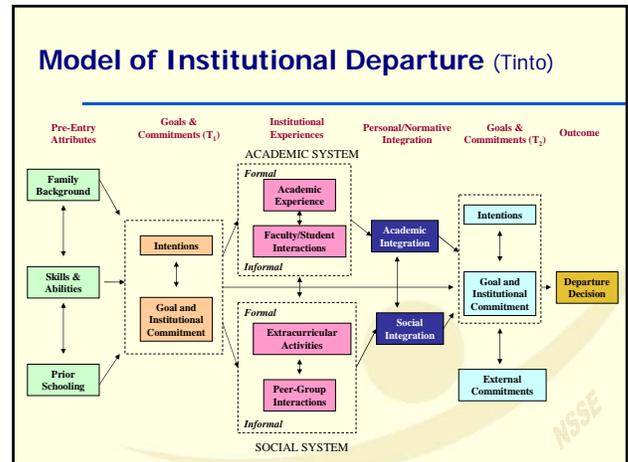
NSSE and Retention

Links between NSSE & Retention Goals:

- NSSE is a stimulus for *reflection* on what the institution does well, & areas for improvement
- Ultimate goal of retention initiative is *improved* educational experiences (not just retention)
- Identifies what *distinguishes* institution, where student experience matches espoused mission, & where it falls short
- NSSE results can be *connected* to institutional data to build retention models

Retention

- What factors affect student retentions?
 - Financial Aid
 - GPA
 - Tinto's Retention Model
 - Other personal and environmental factors



NSSE and Tinto's Model of Student Persistence

- Students engagement in effective educational practices as indication of level of academic & social integration (1 a-v; 6a-f; 9a-g etc.)
- Institutional emphasis items suggest institutions' level of commitment to student success (10 a-g)
- Student intentions to engage in educational activities before graduating (7 a-h)

NSSE and Retention at Elon

- Predicting Retention:
 - What is one of the most effective procedures to forecast retention?
 - Simply ask they plan to return !!
 - 93% of the variance is explained

NSSE and Retention at Elon: Correlated Items

Correlations					
		Retention	If you could start over again, would you go to the SAME INSTITUTION you are now attending?	How would you evaluate your entire educational experience at this institution?	Quality: Your relationships with other students
Retention	Pearson Correlation	1	.368**	.227**	.233**
	Sig. (2-tailed)		.000	.000	.000
	N	377	351	351	369
If you could start over again, would you go to the SAME INSTITUTION you are now attending?	Pearson Correlation	.368**	1	.608**	.547**
	Sig. (2-tailed)	.000		.000	.000
	N	351	351	351	351
How would you evaluate your entire educational experience at this institution?	Pearson Correlation	.227**	.608**	1	.487**
	Sig. (2-tailed)	.000	.000		.000
	N	351	351	351	351
Quality: Your relationships with other students	Pearson Correlation	.233**	.547**	.487**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	369	351	351	369

** Correlation is significant at the 0.01 level (2-tailed).

NSSE and Retention at Elon: Logical Questions

- Since a students' relationship with other students affects retention...
 - What programs/services can either be created or enhanced to foster these relationships?
 - Has your institution looked at the effect of these programs/services?
 - Check published findings



Humboldt State University

- 2002 NSSE surveyed 169 freshmen
 - 139 returned and 30 withdrawn
- Analysis on individual item level
- Withdrawn students had substantially lower engagement
- A large number of the items reflect attitudes that could be identified in conversations between students and advisors



Humboldt State University

Item	Percentage	
	Withdrawals	Others
Never made a class presentation	27%	9%
Never worked with classmates on class assignments	27	9
Very often received prompt feedback from faculty	7	22
Never participated in a community-based project	87	68
Read five or more nonassigned books	17	38
Plan to have an internship or field experience	47	73
Spent zero hours participating in cocurricular activities	77	48
College contributed very little to understanding other races	27	12
College contributed very little to solving real-world problems	23	14
College contributed very little to developing code of ethics	35	13
College contributed very little to your contributing to the community	47	25
College has very little emphasis on helping students to thrive socially	37	16



Georgia Institute of Technology

- 2005 NSSE surveyed 1244 freshmen
 - 1178 returned and 66 withdrawn
- Analysis on NSSE Benchmark using regression model and controlled for GPA and a control factor
- Supportive Campus Environment (SCE) is the only benchmark that significantly contribute to the regression model



Georgia Institute of Technology

Table 3. Significant Contributors to Retention (Benchmarks)—All Students (N = 1083)

Retained? (1 = No, 2 = Yes)	Beta	Partial Corr.	Partial R ²	Adjusted R ² for Model
Control Factor	0.131*	0.133	0.0177*	.050*
GPA	0.202*	0.201	0.0404*	
Level of Academic Challenge	0.004	0.003	0.0000	
Active and Collaborative Learning	0.050	0.048	0.0023	
Student-Faculty Interaction	-0.007	-0.056	0.0031	
Enriching Educational Experiences	-0.028	-0.025	0.0006	
Supportive Campus Environment	0.104*	0.100	0.0100	

* Beta - significant individual contributor ($p < .05$)
 * R-square - small or greater effect size ($> .03$)



Adelphi University

- Using NSSE results to test Tinto's retention model
- Create 2 new scales "social integration scale" and "academic integration scale" from NSSE items (alpha = .79 & .72)
- Using NSSE 2000-2003, 585 freshmen surveyed, 508 returned and 77 withdrawn
- Control variables: gender, high school GPA, SAT
- Social and Academic Integration have effects on freshmen retention



The Facilitator's Guide in Action

- Simply reporting results may not lead to action
- The Facilitator's Guide is an instructor's manual and can help you get organized
- Provides suggestions for leading a workshop or session on understanding, interpreting and taking action on NSSE data



The Facilitator's Guide in Action

- ♦ Topic 1: Respondent Characteristics
 - ♦ Topic 2: Mean Comparisons
 - ♦ Topic 3: Pattern Analysis
 - ♦ Topic 4: Frequency Distributions
 - ♦ Topic 5: Benchmark Comparisons
- ♦ Copies available: www.nsse.iub.edu/institute



The Facilitator's Guide in Action

- ♦ Exercise 4: Frequency Distributions
 - ♦ Good for an internal view of your own students
 - ♦ Look at the “never” responses. What percentages are too high? Do these make sense? What does this tell us?
 - ♦ What other encouraging or challenging patterns do you see in the frequency reports



Making Sense of Data: Two Approaches

- ✓ **Most valued activities**
What is most valued at your institution, in departments, what does the data show?
- ✓ **Eliminate “Nevers”**
Work on reducing or eliminating reports by students of *never* doing specific engagement activities.



The Facilitator's Guide in Action

- ♦ Exercise 5: Benchmark Reports
- ♦ Good for external comparison purposes
 - ♦ What are the patterns here?
 - ♦ What are our strong points? Challenges?
 - ♦ How does our institution perform, given our student and institutional characteristics?
 - ♦ How does our institution compare, given our student and institutional characteristics?



Making Sense of Data: Benchmarking

- Two Approaches:
- ♦ **Normative** - compares your students' responses to those of students at other colleges and universities.
 - ♦ **Criterion** - compares your school's performance against a predetermined value or level appropriate for your students, given your institutional mission, size, curricular offerings, funding, etc.



Discussion and Questions

Jillian Kinzie
 Indiana University Center for
 Postsecondary Research
 1900 East 10th Street
 Eigenmann Hall, Suite 419
 Bloomington, IN 47406-7512

Ph: 812-856-5824
 Fax: 812-856-5150
 Web site: www.nsse.iub.edu
 E-mail: nsse@indiana.edu

