

Beyond the Standard Reports: Digging Deeper into Your NSSE Data



Bob Gonyea, Associate Director
Center for Postsecondary Research
Indiana University

Overview

- ◆ Possibilities
- ◆ NSSE measurement scales
- ◆ Examples
- ◆ Other data considerations
- ◆ Discussion

Possibilities

- ◆ Merging NSSE data with school records
- ◆ Descriptive displays of engagement patterns by any number of student characteristics
- ◆ Prediction models for retention, degree attainment, grades, other outcomes
- ◆ Tracking student engagement year to year
- ◆ Special comparisons against aspirational, regional, and mission-related peer institutions
- ◆ Program assessment
- ◆ Accreditation reporting
- ◆ Consortium and system data sharing
- ◆ Scholarly research

Measurement Scales

National Survey of Student Engagement Measurement Scales, Component Items, and Alpha Reliabilities		
Scale	Items ^a	α
Benchmarks of Effective Educational Practice		
Level of Academic Challenge	readasgn, writemom, writemid, writesml, analyze, synthesz, evaluate, applying, workhard, acadpr01, envschol	.72
Active and Collaborative Learning	clquest, clpresen, classgrp, occgrp, tutor, commproj, oocideas	.63
Student-Faculty Interactions	facgrade, facideas, facplans, facfeed, facother, research ^b	.76
Enriching Educational Experiences	diffstu2, divrstud, envdivrs, cocurr01, itacadem, intern ^b , learncom ^b , volunter ^a , forlang ^b , studyabr ^b , indstudy ^b , seniorx ^b	.56 ^c
Supportive Campus Environment	envsocial, envsuprt, envnacad, envstu, envfac, envadm	.76
Complex Learning		
Deep Learning	integrat, divclass, intideas, facideas, oocideas, synthesz, analyze, evaluate, applying	.82
Higher Order Thinking	analyze, synthesz, evaluate, applying	.82

Measurement Scales

Benchmarks of Effective Educational Practice

Level of Academic Challenge
Active and Collaborative Learning
Student-Faculty Interactions
Enriching Educational Experiences
Supportive Campus Environment

Complex Learning

Deep Learning
Higher Order Thinking
Integrative Learning
Diversity

Measurement Scales

Satisfaction

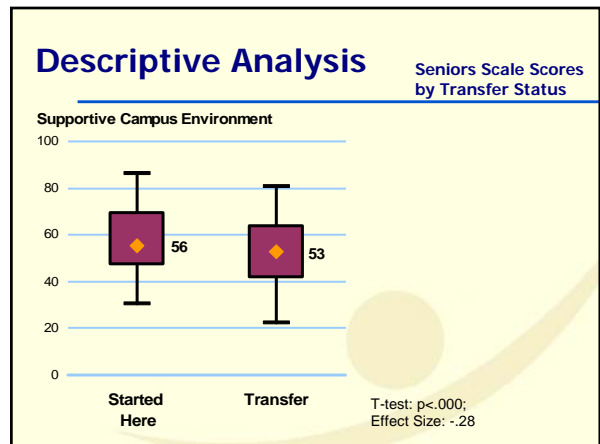
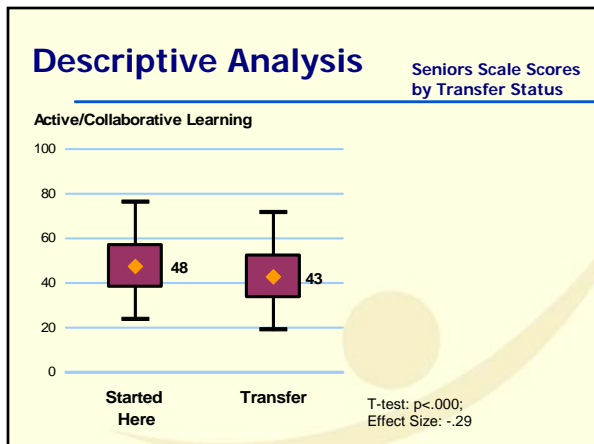
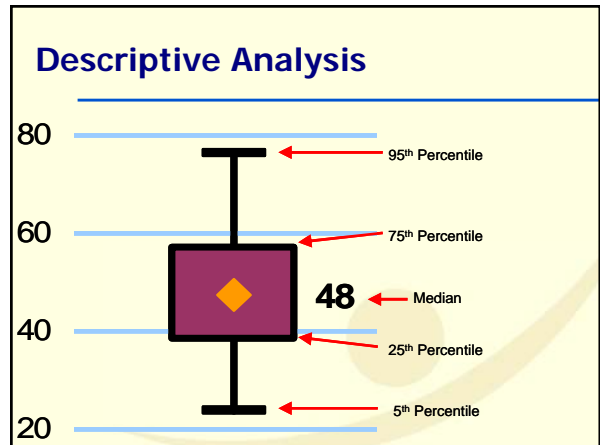
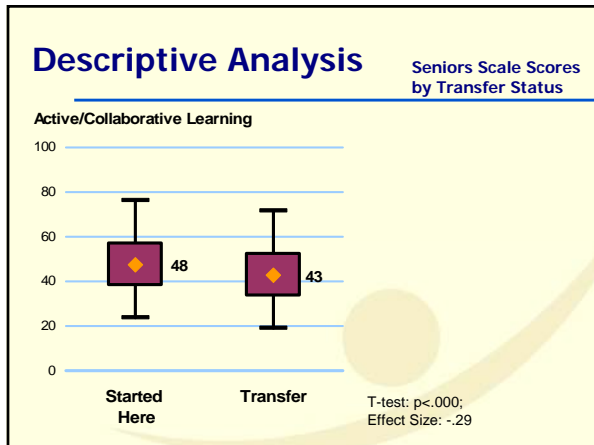
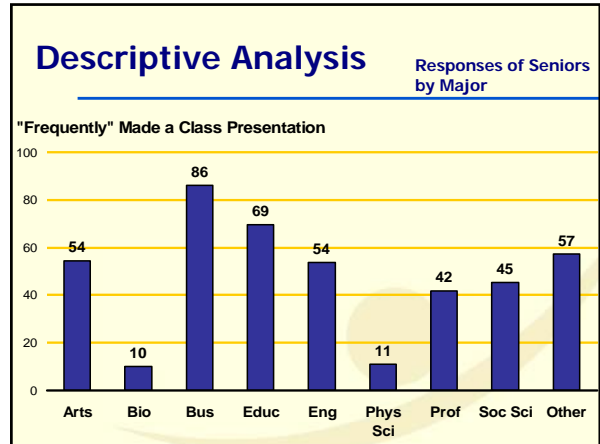
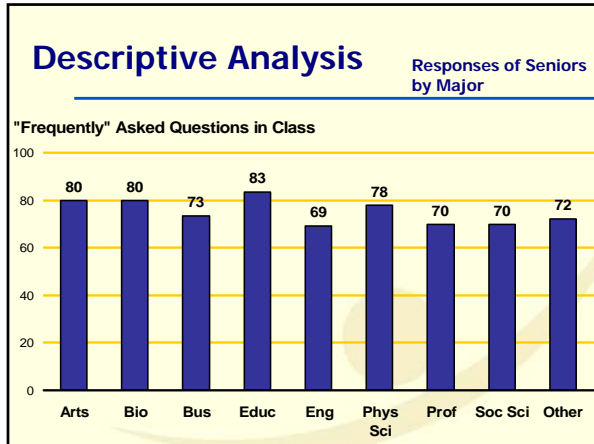
General Satisfaction
Satisfaction plus Quality of Campus Relationships

Campus Environment

Environmental Emphases
Quality of Campus Relationships

Gains Factors

Personal/Social
General Education
Practical Competence



FAQ: Benchmark Reports

FREQUENTLY ASKED QUESTIONS ABOUT INSTITUTIONAL BENCHMARK REPORTS

Answers on the 2004 Annual Report Website:
nsse.iub.edu

1. Questions about Changes to the 2004 Benchmark Report

- What changes were made to the 2004 Benchmark Report? Why were the changes made?

2. Questions about Benchmark Scores

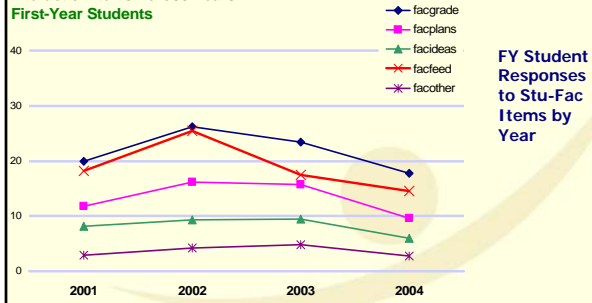
- My Level of Academic Challenge benchmark score for seniors is 61.0 and the 90th decile score for Master's institutions is also 61.0. However, the shading does not cover the 90th decile. Why not?
- Can I calculate my own benchmark scores for intra-institutional comparisons?
- On the questions that make up the benchmarks, how do I calculate frequencies that are comparable to those reported in the 2004 Annual Report?

FAQ: Benchmark Reports

- ♦ Rescaling of Enriching Items
- ♦ Benchmark Recalculations
- ♦ Student-level "Benchmark" scores
 - ♦ EEE: not comparable
 - ♦ SFI: comparable by removing "research" item
- ♦ Multi-year Comparisons

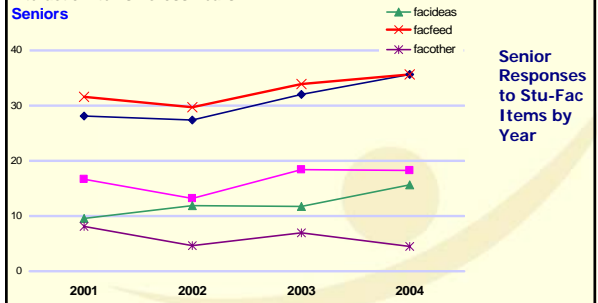
Comparisons Across Years

Percent "Frequently" on Student-Faculty Interaction Items Across Years: First-Year Students



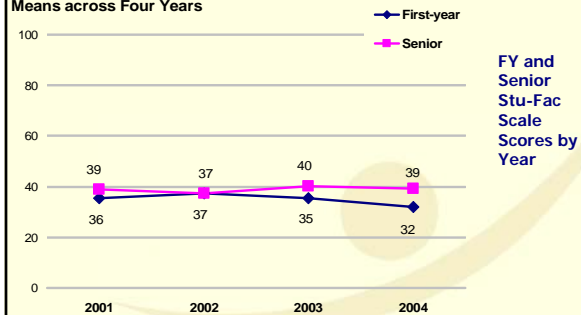
Comparisons Across Years

Percent "Frequently" on Student-Faculty Interaction Items Across Years: Seniors



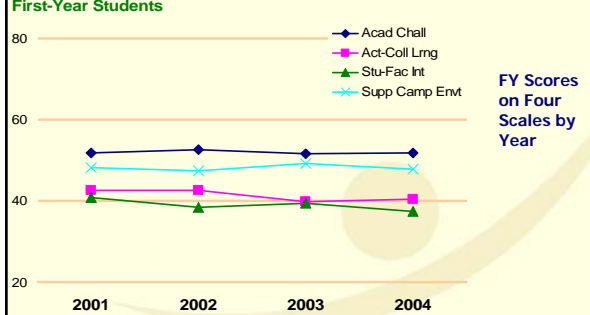
Comparisons Across Years

Student-Faculty Interaction Means across Four Years



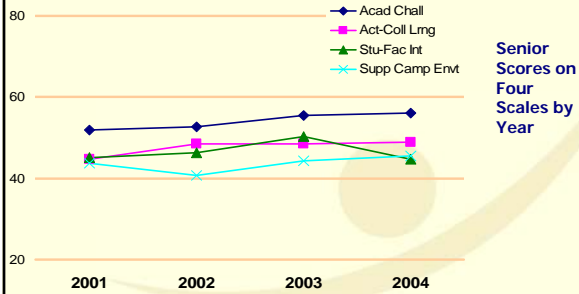
Comparisons Across Years

Benchmark Comparison Across Years: First-Year Students



Comparisons Across Years

Benchmark Comparison Across Years:
Seniors



FY Student t-test Comparisons 2003 and 2004 at Nesseeville State

Independent Samples t-tests of FY Students between 2003 and 2004

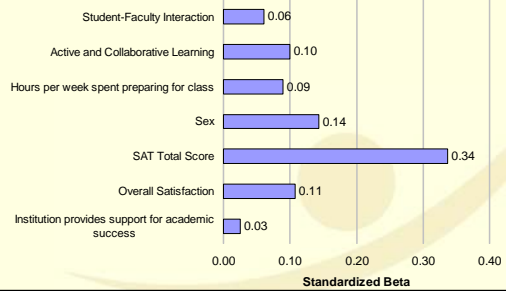
Student-Level "Benchmark" Score	2003	2004	SD	sig.	Effect Size
Academic Challenge	55	54	13	.23	.08
Active and Collaborative Learning	41	41	15	.65	.00
Student-Faculty Interaction	41	38	19	.00	.16
Supportive Campus Environment	61	60	17	.35	.06

Regression on Student-Faculty Interaction with Year

	B	Std. Error	Beta	t	Sig.
(Constant)	39.6	9.6		4.1	0.000
international	3.6	3.1	0.0	1.1	0.255
enrollment	-2.5	4.2	0.0	-0.6	0.551
sex	-1.1	1.3	0.0	-0.8	0.397
major: art	1.5	2.5	0.0	0.6	0.553
major: bio	0.1	2.8	0.0	0.0	0.983
major: bus	3.5	2.4	0.1	1.4	0.156
major: phys	-4.3	4.4	0.0	-1.0	0.325
major: sos	-0.1	2.7	0.0	0.0	0.975
major: und	-5.0	4.6	0.0	-1.1	0.279
major: oth	1.9	2.6	0.0	0.7	0.473
major: pro	2.5	2.9	0.0	0.9	0.391
YEAR	3.6	1.2	0.1	2.9	0.004

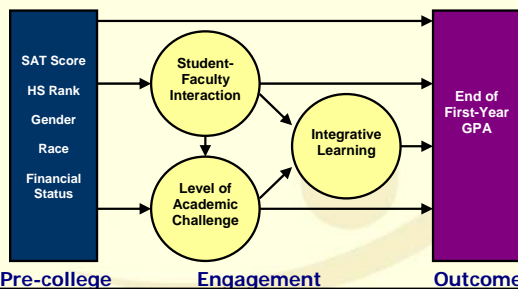
Multivariate Modeling

Regression model predicting grades at the end of the first year.



Multi-equation Modeling

A structural equation model explaining longitudinal relationships that lead to FY grades.



Special Peer Comparisons

Standard Means Report

Variable	Class	Nesseeville		Nesseeville compared with:		Master's		NSSE 2003	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
CLQUEST	FY	2.95		2.81				2.84	
	SR	2.19		2.12				2.12	
CLPRESN	FY	2.51		2.27		***	.31	2.24	*** .35
	SR	2.90		2.90				2.84	
REWORKAP	FY	2.95		2.74		*	.22	2.70	* .25
	SR	2.57		2.56				2.51	
INTGRAT	FY	3.13		3.05				3.06	
	SR	3.37		3.34				3.34	
DIVCLASS	FY	2.84		2.71				2.73	
	SR	2.85		2.76				2.75	
CLINPREP	FY	1.99		1.98				2.01	
	SR	1.94		2.03				2.07	
CLASGRP	FY	2.57		2.39		*	.22	2.34	** .28
	SR	2.53		2.55				2.46	
DCCGRP	FY	2.03		2.33		***	-.36	2.40	*** .45
	SR	2.54		2.71		*	-.20	2.73	* .22

Special Peer Comparisons

Standard Means Report

		Nesseville compared with:					
		Nesseville			Master's NSSE 2003		
Variable	Class	Mean	SD	Mean	SD	Mean	SD
In your experience at your institution during the current school year, about how often have you done each of the following? 1=never, 2=sometimes, 3=often, 4=very often							
CLQUEST	FY	2.95		2.81		2.84	
	SR	3.19		3.13		3.12	

Special Peer Report - Residential

		Nesseville Residential compared with:					
		Nesseville Residential			Master's Residential NSSE 2003 Residential		
Variable	Class	Mean	SD	Mean	SD	Mean	SD
In your experience at your institution during the current school year, about how often have you done each of the following? 1=never, 2=sometimes, 3=often, 4=very often							
CLQUEST	FY	3.04		2.81		2.85	
	SR	3.54		3.19		3.20	

Special Peer Report - Commuter

		Nesseville Commuters compared with:					
		Nesseville Commuters			Master's Commuters NSSE 2003 Commuters		
Variable	Class	Mean	SD	Mean	SD	Mean	SD
In your experience at your institution during the current school year, about how often have you done each of the following? 1=never, 2=sometimes, 3=often, 4=very often							
CLQUEST	FY	3.11		2.80	**	2.81	**
	SR	3.16		3.12		3.10	

Other Considerations

- ♦ Sampling error
- ♦ Sample size and statistical tests
- ♦ Oversampling
 - ♦ Random
 - ♦ Targeted
 - ♦ Local
- ♦ Non-response bias
- ♦ Weighting your sample to look like the population
- ♦ Caution about recoding certain items
 - ♦ Enriching items are categorical
- ♦ Test for self-report accuracy
- ♦ Comparability of survey items year-to-year

For More Information

Email: rgonyea@indiana.edu

NSSE website: <http://nsse.iub.edu>



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