



Relationship Between Academic Engagement and Student Satisfaction

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Overview

- Why were we concerned about student engagement and satisfaction?
- What did we want to accomplish?
- How did we do it?
- What did we find?
- What does it mean?
- Discussion

Engagement and Satisfaction

- Academic Engagement – The time and energy students devote to educationally productive activities (Carini, Kuh, & Klein, 2006)
- Student Satisfaction – An outcome capturing perceptions of institutional fit, institutional climate, and/or goal achievement (York, Gibson, & Rankin, 2015)



Registration for NSSE & FSSE 2016 is now open!

Photo courtesy of California State University Stanislaus

ANNOUNCEMENTS

[Click to go in depth »](#)

NSSE 2015 administration closed June 1

More than 1.5 million students from 575 U.S. and Canadian colleges and universities were invited to complete NSSE 2015. Institutional Reports are scheduled for delivery in mid-August.

Register now for BCSSE 2015

View NSSE's full AIR 2015 session list

Presentation materials from April 2015 NSSE workshop hosted by Bucknell University

Refreshing Engagement: NSSE at 13

Read the *Change* magazine Editor's Choice article summarizing lessons from NSSE's first 13 years and features of the updated survey.

[Read more ...](#)

Updated NSSE Survey

[Click for details](#)

Learn about **Engagement Indicators** and **High-Impact Practices**

NSSE IN ACTION

“The revised NSSE is definitely a stronger instrument. The updated reports are visually appealing—easy to absorb for the statistically uninitiated, while at the same time we can grasp sophisticated constructs

Ellen Boylan, Director of Planning & Institutional Research, Marywood University



FEATURED RESOURCE

Read how four institutions used their NSSE 2013

NSSE

National Survey of
Student Engagement

FSSE

Faculty Survey of
Student Engagement

BCSSE

Beginning College Survey of
Student Engagement

NSSE Institute

For Effective
Educational Practice

WHO'S PARTICIPATING

Enter all or part of an institution's name:

[Advanced Search »](#)

PUBLICATIONS & PRESENTATIONS (NEW!)

View featured publications and recent presentations. Search NSSE-related works by topic and year.

ANNUAL RESULTS

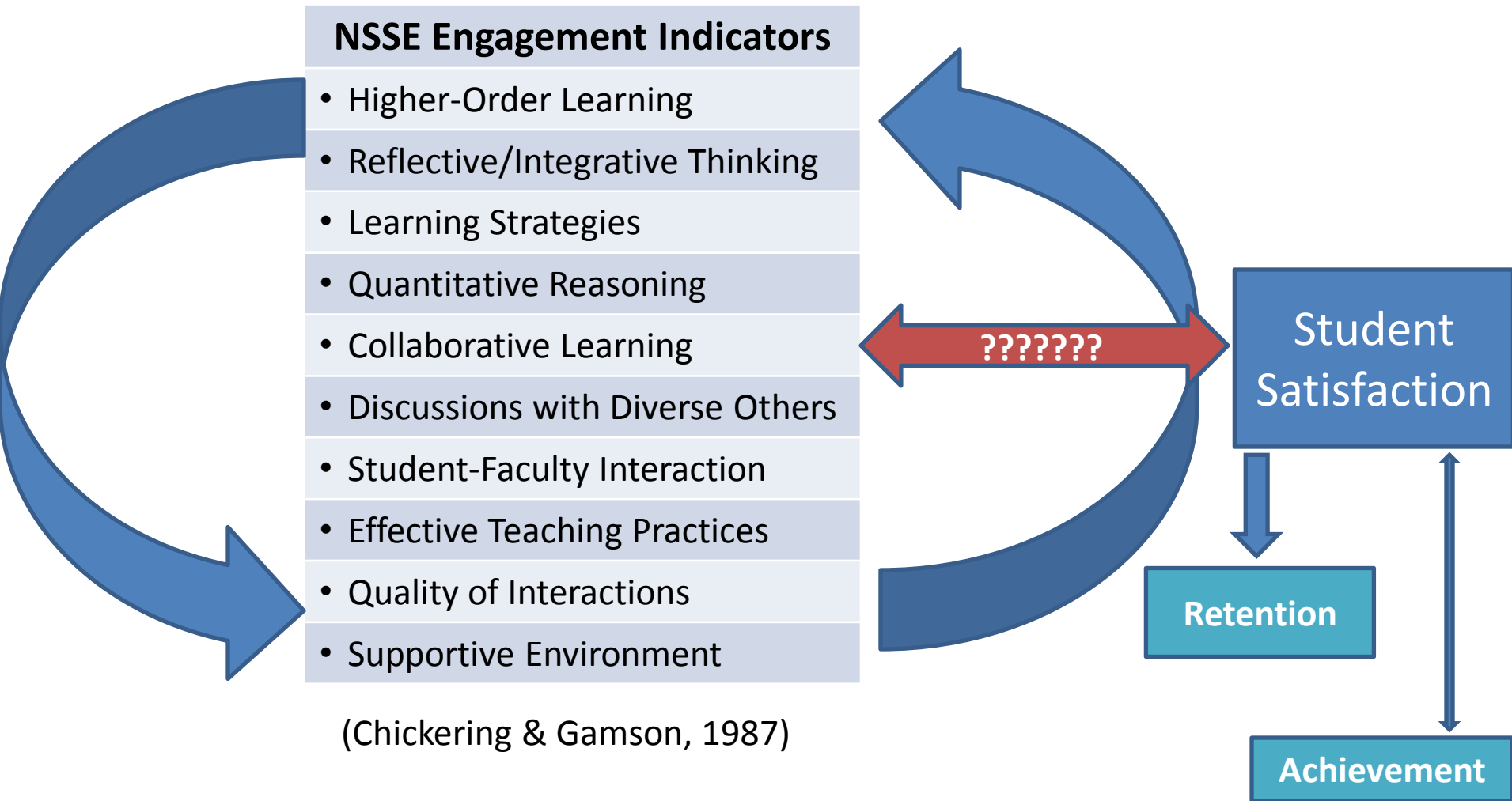
Findings from the most recent NSSE, FSSE, and BCSSE administrations

WEBINARS

Register for and view the latest webinars on the NSSE Institutional Report, Psychometric Portfolio, Response Rates & Incentives, and more.

HOW INSTITUTIONS USE NSSE

Conceptual Model



(Chickering & Gamson, 1987)

(Strahan & Crede, 2015)

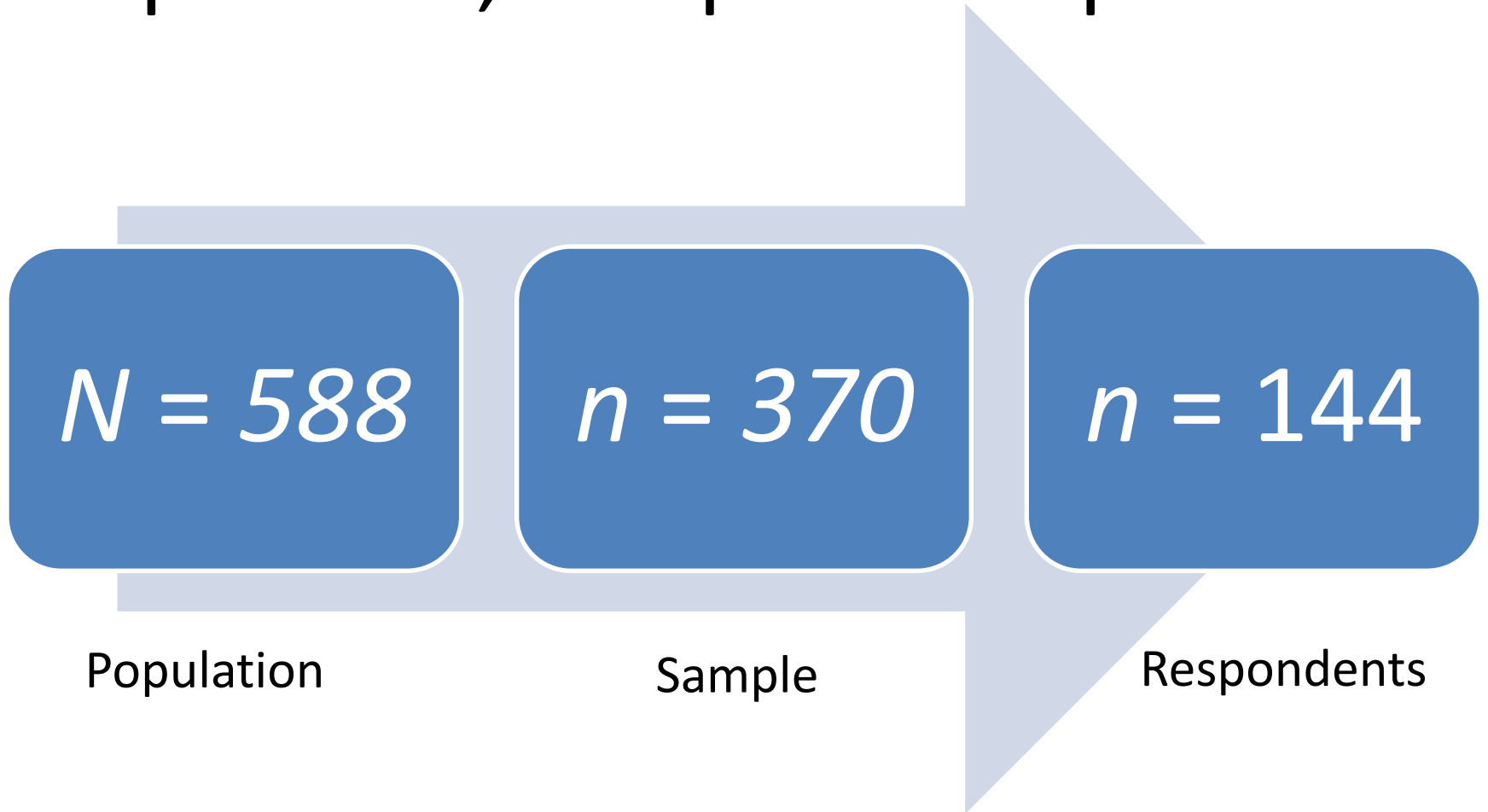
Objectives

- Determine AFLS seniors' level of academic engagement and their level of institutional satisfaction;
- Determine the relationship between academic engagement and student satisfaction; and
- Determine if a single or linear combination of academic engagement variables could explain a significant ($p < .05$) portion of the variance in student satisfaction.

Methods

- Data: 2013 National Survey of Student Engagement (NSSE) administered at U of A
 - Data provided by Office of Institutional Research
 - IRB approval
- NSSE collects data from college freshmen and seniors about their level of participation in learning and personal development activities
 - Administered at 1,574 institutions since 2000
 - Approximately 4.5 million students have completed the survey since 2000
 - Extensive validation and reliability studies have been conducted

Population, Sample & Respondents



Population: Senior AFLS students enrolled in Spring 2013 semester

Response Rates: AFLS = 38.9% vs. UA = 33.5%

Study Variables

Variable	Theme	# Items	Scale	Coefficient α
• Higher-Order Learning	Academic Challenge	4	0 – 60	.85
• Reflective/Integrative Thinking		7	0 – 60	.88
• Learning Strategies		3	0 – 60	.77
• Quantitative Reasoning		3	0 – 60	.87
• Collaborative Learning	Learning with Peers	4	0 – 60	.80
• Discussions with Diverse Others		4	0 – 60	.89
• Student-Faculty Interaction	Experiences with Faculty	4	0 – 60	.86
• Effective Teaching Practices		4	0 – 60	.86
• Quality of Interactions	Campus Environment	5	0 – 60	.78
• Supportive Environment		8	0 – 60	.88
• Satisfaction	NA	2	1 – 4	.80

Results

Obj. 1: Describe Seniors' Academic Engagement and Satisfaction

Variable	Theme	<i>M</i>	<i>SD</i>	Descriptor
• Higher-Order Learning	Academic Challenge	37.0 ^w	14.7	Often
• Reflective/Integrative Thinking		36.3 ^w	11.5	Often
• Learning Strategies		38.2 ^w	13.7	Often
• Quantitative Reasoning		29.8 ^w	16.5	Sometimes
• Collaborative Learning	Learning with Peers	34.7 ^w	14.3	Often
• Discussions with Diverse Others		41.7 ^w	16.3	Often
• Student-Faculty Interaction	Experiences with Faculty	26.9^{wx}	17.7	Sometimes
• Effective Teaching Practices		40.6 ^w	24.0	Often
• Quality of Interactions	Campus Environment	44.1^{wxy}	10.3	Often
• Supportive Environment		33.3 ^w	12.4	Often
• Satisfaction	NA	3.39 ^z	0.63	High

^w0 to 60 scale. ^xSignificantly ($p < .01$) higher than RU/VH mean.

^ySignificantly higher ($p < .05$) than UA non-AFLS. ^z1 – 4 scale.

Obj. 2: Relationship Between Engagement Indicators and Satisfaction

Engagement Variable	r
• Higher-Order Learning	← .25 →
• Reflective/Integrative Thinking	← .05 ^{NS} →
• Learning Strategies	← .19 →
• Quantitative Reasoning	← .17 ^{NS} →
• Collaborative Learning	← .29 →
• Discussions with Diverse Others	← .20 →
• Student-Faculty Interaction	← .27 →
• Effective Teaching Practices	← .30 →
• Quality of Interactions	← .48 →
• Supportive Environment	← .35 →



$r_{X,X}$ ranged from 0.12 to 0.51

Obj. 2: Relationship Between Engagement Indicators and Satisfaction – Unique Variance

Engagement Variable	ΔR^2
• Higher-Order Learning	← .0102 →
• Reflective/Integrative Thinking	← .0265 →
• Learning Strategies	← .0079 →
• Quantitative Reasoning	← .0019 →
• Collaborative Learning	← .0235 →
• Discussions with Diverse Others	← .0001 →
• Student-Faculty Interaction	← .0014 →
• Effective Teaching Practices	← .0016 →
• Quality of Interactions	← .0731 →
• Supportive Environment	← .0315 →

$P < 0.10$



Satisfaction Regressed on Selected Engagement Indicators

$F(4, 100) = 11.86, p < 0.0001, R^2 = 0.3217, Adj. R^2 = 0.2946$

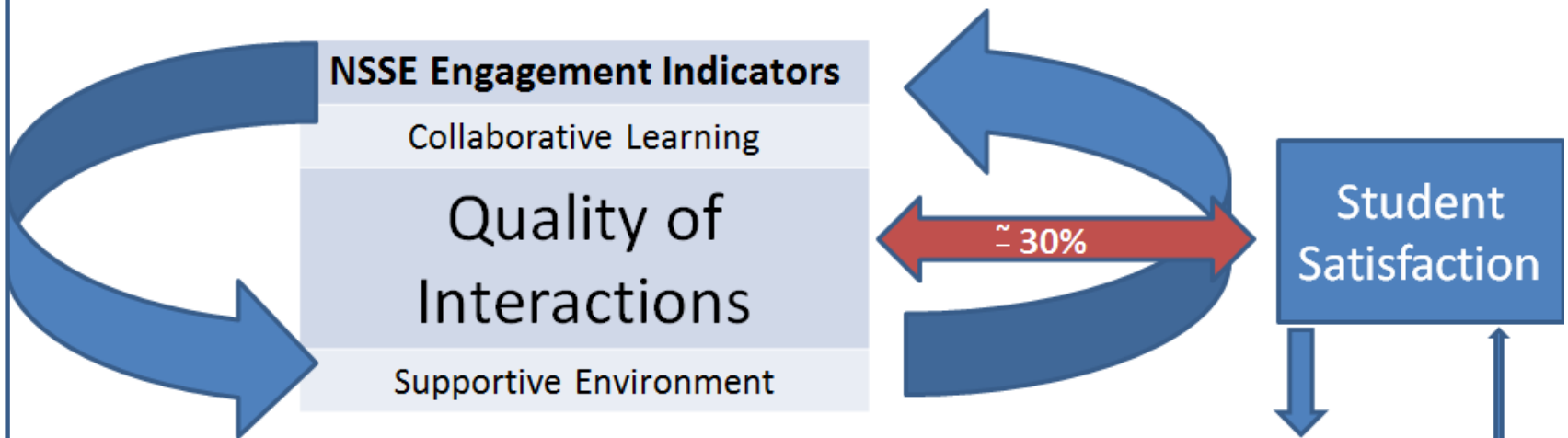
Engagement Indicator	<i>B</i>	<i>SE B</i>	β	<i>t</i>	ΔR^2
Quality of Interactions	0.232	0.005	0.383	4.36 ^{****}	0.1287 ^{****}
Supportive Environment	0.012	0.005	0.231	2.53 [*]	0.0434 [*]
Collaborative Learning	0.009	0.004	0.208	2.35 [*]	0.0374 [*]
Reflective and Integrative Learning	-0.008	0.005	-0.138	-1.55 ^{NS}	0.0162 ^{NS}

^{NS}Not significant; ^{*} $p < 0.05$; ^{****} $p < 0.0001$

$$Y_{pred} = 1.893 + 0.023(QI) + 0.012(SE) + 0.009(CL) + -0.008(RI)$$

Conclusions

Conceptual Model



- Campus Environment indicators were best predictors of student satisfaction
- Academic Challenge and (academic) Experiences with Faculty do not explain significant unique variance in student satisfaction

Recommendations - Practice

- Treating students like human beings:
 - Is cheap
 - Is relatively easy
 - Seems to improve their satisfaction
- We should probably do more of it
 - Should probably even look for ways to do a better job of it
- Encourage efforts to build on strengths (Student-Faculty Interactions and Quality of Interactions) and improve in other areas

Recommendations - Research

- Identify factors explaining the remaining 70% of variance in student satisfaction.
- Determine the impact of academic engagement on measures of student learning
 - Especially Academic Challenge and (academic) Experiences with Faculty
- Determine if agriculture students/colleges differ from non-agriculture students/colleges
 - Multi-institutional research with existing data

Thank you!