


Shaping Deep Approaches to Learning on Your Campus


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Overview

- NSSE and related surveys
- Deep Approaches to Learning
- Selected Findings
- Ideas for Practice
- Developing an Action Plan
- Concluding Thoughts



National Survey of Student Engagement 1

We need to

“...view student learning and student needs through new lenses”

“talk and think about information on student learning on your campuses”

set aside “turfs and specialties that have divided campuses for years”

Cross, 1996, pp. 7, 8, & 11

NSSE & Related Surveys



Assessing Student Engagement

- National Survey of Student Engagement (NSSE)
- Faculty Survey of Student Engagement (FSSE)
- Other surveys of student engagement
 - BCSSE, LSSSE, HSSSE, CCSSE

What Does NSSE Measure?

- Student engagement in activities that prior research connects to valued educational outcomes
- Effective Educational Practices
 - Academic Challenge
 - Student-Faculty Interaction
 - Active & Collaborative Learning
 - Enriching Educational Experiences
 - Supportive Campus Environment





Other Things NSSE Measures

- Background characteristics
- Self reported gains
- Grades
- Satisfaction
- Deep approaches to learning

Question	Response Options
1. How often do you read a book for pleasure?	Never, Rarely, Sometimes, Often, Always
2. How often do you read a book for school?	Never, Rarely, Sometimes, Often, Always
3. How often do you read a book for research?	Never, Rarely, Sometimes, Often, Always
4. How often do you read a book for fun?	Never, Rarely, Sometimes, Often, Always
5. How often do you read a book for work?	Never, Rarely, Sometimes, Often, Always
6. How often do you read a book for a hobby?	Never, Rarely, Sometimes, Often, Always
7. How often do you read a book for a class?	Never, Rarely, Sometimes, Often, Always
8. How often do you read a book for a job?	Never, Rarely, Sometimes, Often, Always
9. How often do you read a book for a project?	Never, Rarely, Sometimes, Often, Always
10. How often do you read a book for a course?	Never, Rarely, Sometimes, Often, Always

What is Deep Learning?



“Deep learning is learning that takes root in our apparatus of understanding, in the embedded meanings that define us and that we use to define the world”



“Surface-Level Processing”

- Focus on substance
- Emphasize memorization and rote learning
- Goal is simply to avoid failure

(Marton and Säljö, 1976; see also Biggs, 1989, 2003; Ramsden, 2003; Tagg, 2003)

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“Deep-Level Processing”

- Focus on substance *and* the underlying meaning
- Personal commitment to understanding
- Reflection on relationships between pieces of information
- Applying knowledge to “real life”
- Integration & synthesis of information with prior learning

(Marton and Säljö, 1976; see also Biggs, 1989, 2003; Ramsden, 2003; Tagg, 2003)

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Process and Outcome

- Deep approaches to learning (process)
 - Learning activities characterized by deep connections to the material
- Deep learning (outcome)
 - Learning of substance and underlying meaning

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Measuring Deep Approaches to Learning on NSSE





Deep Approaches to Learning Reflective Learning

- Students were asked how often they did the following during the current school year:
 - Examined the strengths and weaknesses of your own views on a topic or issue
 - Tried to better understand someone else's views by imagining how an issue looks from his or her perspective
 - Learned something that changed the way you understand an issue or concept

1 = Never to 4 = Very often

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Deep Approaches to Learning Integrative Learning

- Students were asked how often they did the following during the current school year:
 - Worked on a paper or project that required integrating ideas or information from various sources
 - Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class discussions or writing assignments
 - Put together ideas or concepts from different courses when completing assignments or during class discussions
 - Discussed ideas from your readings or classes with faculty members outside of class
 - Discussed ideas from your readings or classes with others outside of class (students, family members, co-workers, etc.)

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Deep Approaches to Learning Higher-Order Learning

- Students were asked how much their coursework emphasized the following:
 - **Analyzing** the basic elements of an idea, experience, or theory, such as examining a particular case or situation in depth and considering its components
 - **Synthesizing** and organized ideas, information, or experiences into new, more complex interpretations and relationships
 - **Making judgments** about the value of information, arguments, or methods, such as examining how others gathered and interpreted data and assessing the soundness of their conclusions
 - **Applying** theories or concepts to practical problems or in new situations
- 1 = Very little to 4 = Very much

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Measures: Deep Learning

Deep Learning Scale ($\alpha = 0.73$)

Deep Learning Sub-Scales

- **Reflective learning** (3-items; $\alpha = 0.81$)
- **Integrative learning** (5-items; $\alpha = 0.71$)
- **Higher-order learning** (4-items; $\alpha = 0.82$)

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What Do We Know So Far?

- Students and faculty do deep learning
- Seniors, FT students, and liberal arts colleges do deep learning more than their counterparts
- Deep approaches to learning go hand-in-hand with engagement in other areas

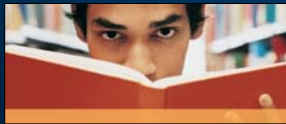
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Deep Learning & Student Outcomes

- Strong relationship with self-reported gains in intellectual and social development
- Moderate relationship with satisfaction
- Relatively weak relationship with grades

Selected Findings: A couple things we've learned about Deep Learning





NSSE 2006: Sample Characteristics

Over 222,300 first-year and senior students from 523 baccalaureate-degree granting institutions

- 47.5% first-years
- 91.4% full time
- 65.0% female

Other Characteristics

- 81.2% traditionally aged
- 19.6% minority
- 30.9% first-generation
- 24.7% transfer students
- 59.9% live on campus

Distribution by Major

- 17% Arts & Humanities
- 15% Social Sciences
- 16% Business
- 10% Education
- 11% Physical & Biological Sciences
- 10% Other Professionals
- 6% Engineering



Selected Findings: Descriptive Statistics

- Results slides...
 - Report % of students whose sub-scale mean is 3.0 or above
 - In other words, those who use deep approaches to learning "often to very often"

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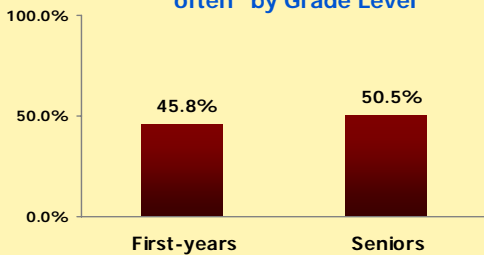
Reflective Learning





Selected Findings: Reflective Learning

Students who use RL "often to very often" by Grade Level

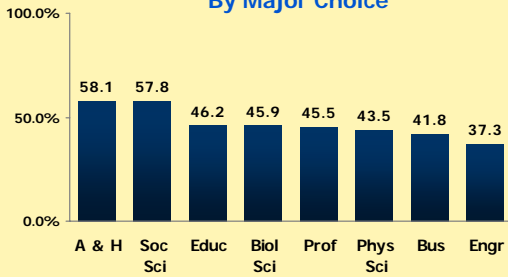


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Selected Findings: Reflective Learning

By Major Choice



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Selected Findings: Reflective Learning

By Major Choice and Grade Level

Major	First-years
A & H	56.1%
Soc Sci	55.2
Biol Sci	45.1
Educ	42.7
Phys Sci	41.8
Prof	40.8
Bus	40.1
Engr	36.8

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Selected Findings: Reflective Learning

By Major Choice and Grade Level

Major	First-years	Seniors
A & H	56.1%	60.0%
Soc Sci	55.2	60.0
Biol Sci	45.1	51.1
Educ	42.7	49.3
Phys Sci	41.8	46.9
Prof	40.8	45.1
Bus	40.1	43.2
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Selected Findings: Reflective Learning

By Major Choice and Grade Level

Major	First-years	Seniors	% Difference
Prof	40.8%	51.1%	+10.2%
Educ	42.7	49.3	6.6
Soc Sci	55.2	60.0	4.8
A & H	56.1	60.0	3.9
Phys Sci	41.8	45.1	3.3
Bus	40.1	43.2	3.1
Bio Sci	45.1	46.9	1.8
Engr	36.8	37.7	0.9

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Selected Findings: Reflective Learning

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Selected Findings: Reflective Learning

- First-year student majoring in engineering
 - Residence Life Director
 - Academic Advisor in The School of Biological Science

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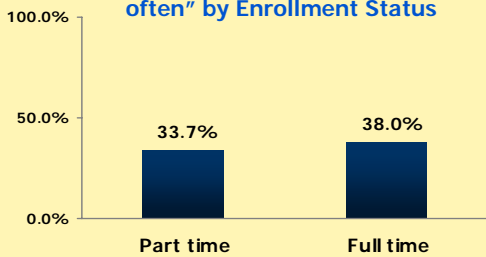
Integrative Learning





Selected Findings: Integrative Learning

Students who use IL "often to very often" by Enrollment Status

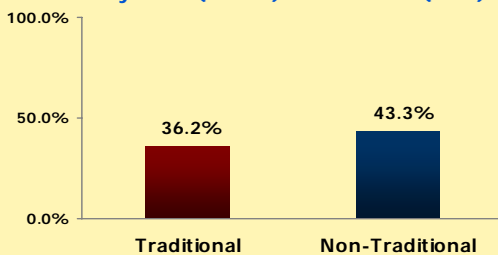


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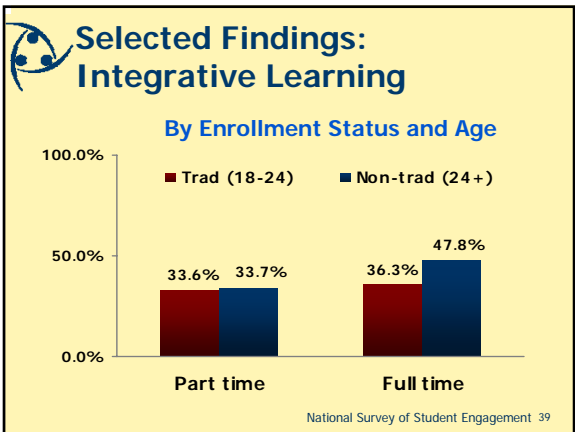


Selected Findings: Integrative Learning

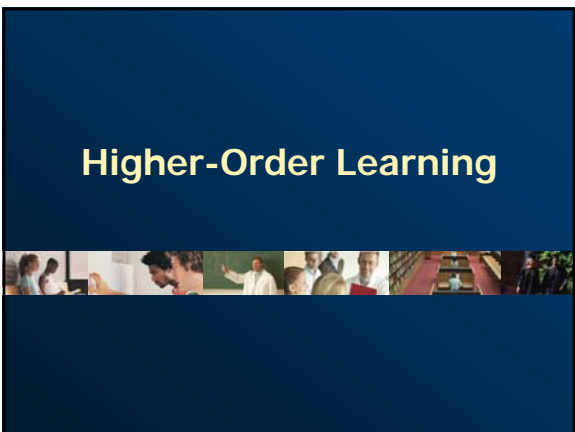
By Trad (18-24) & Non-trad (24+)

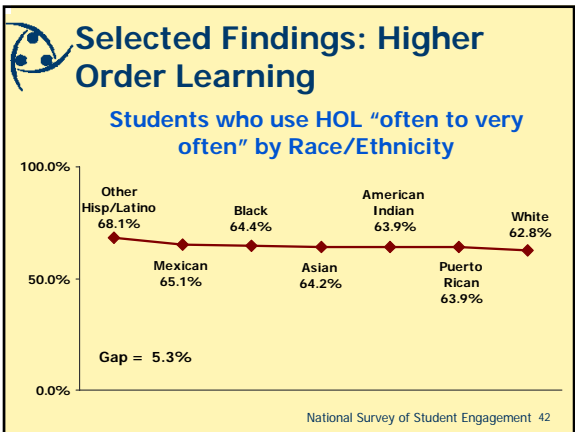


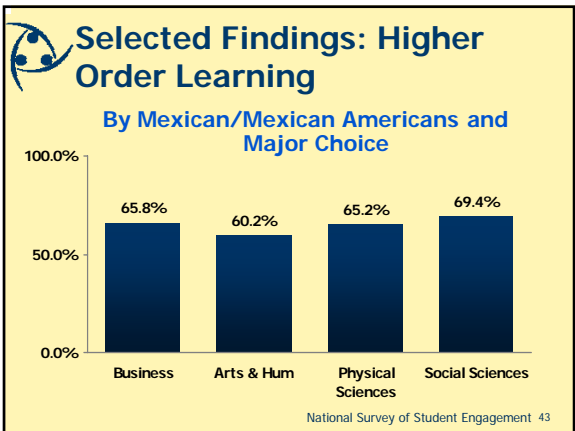
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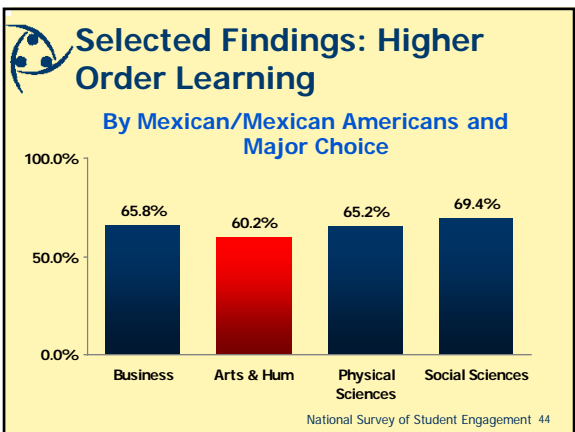


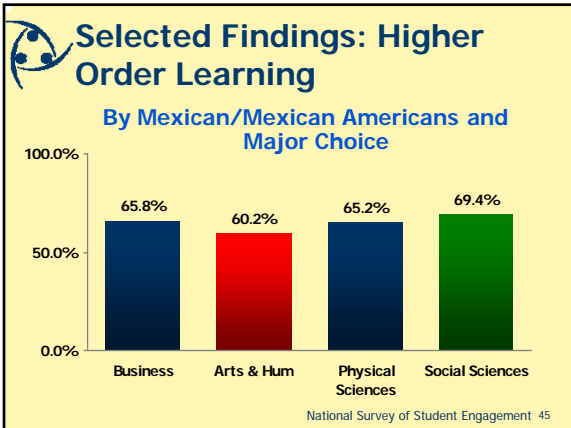
- ### Selected Findings: Integrative Learning
- Non-traditional full-time student
 - Supervising undergraduate students
 - Director of Orientation
 - Coordinator of Commuter Affairs
- National Survey of Student Engagement 40

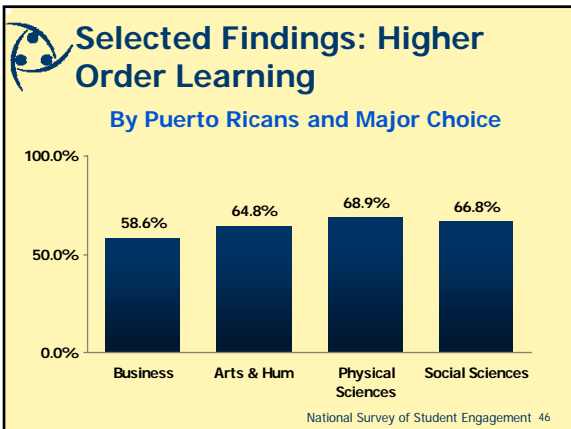


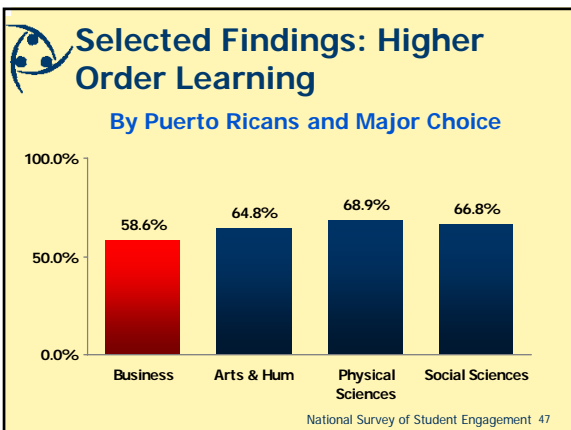


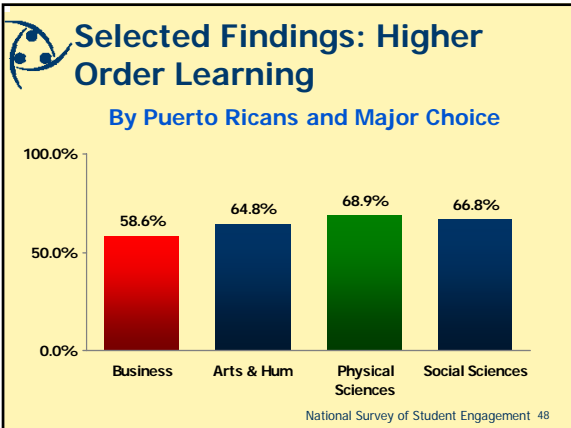


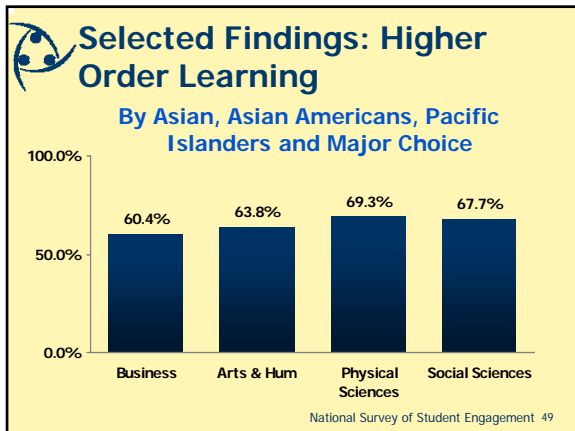


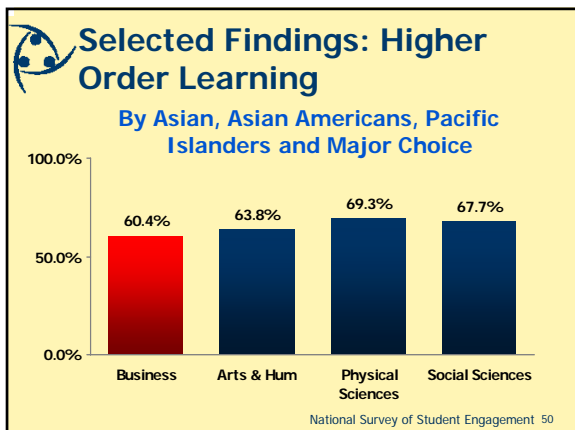


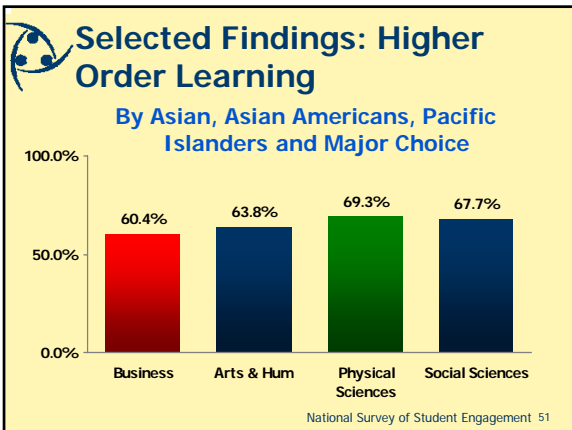


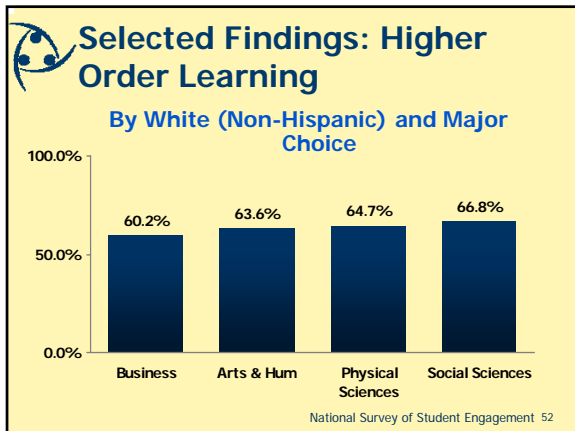


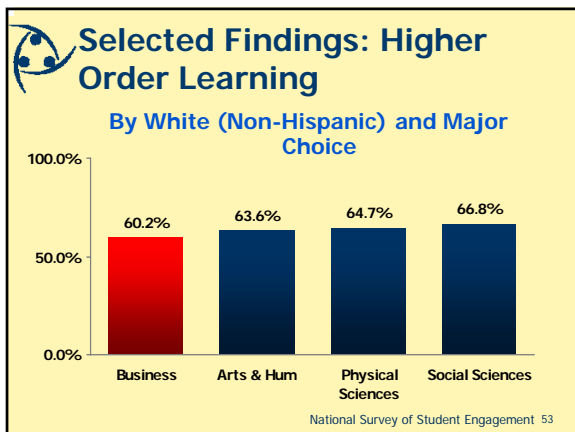


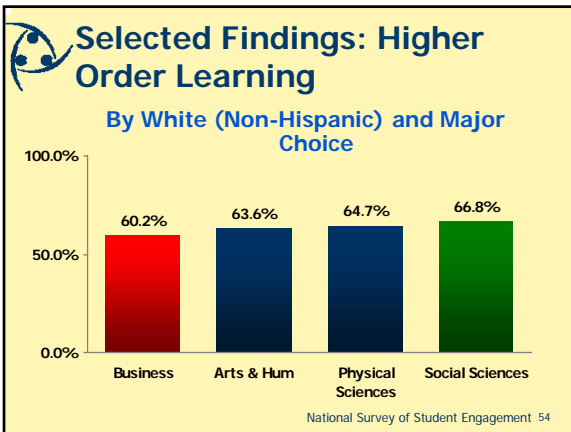


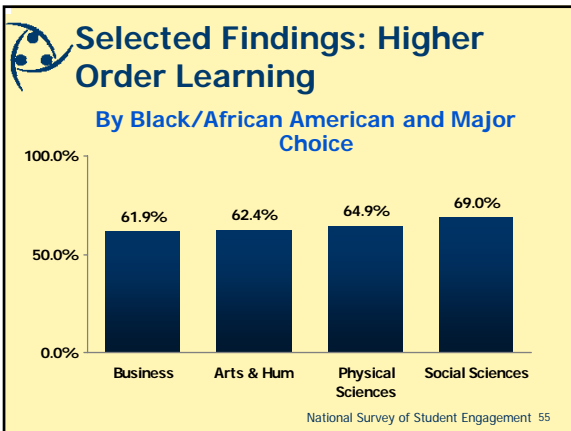


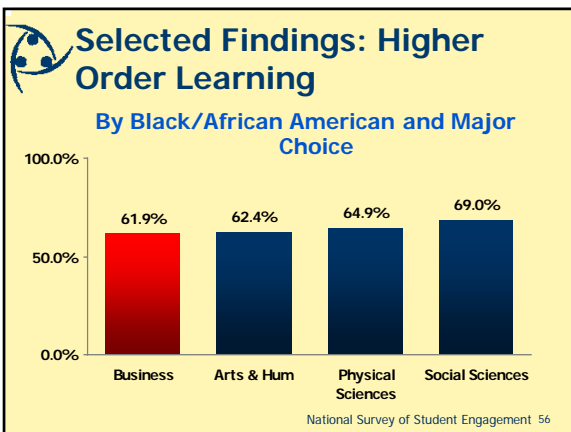


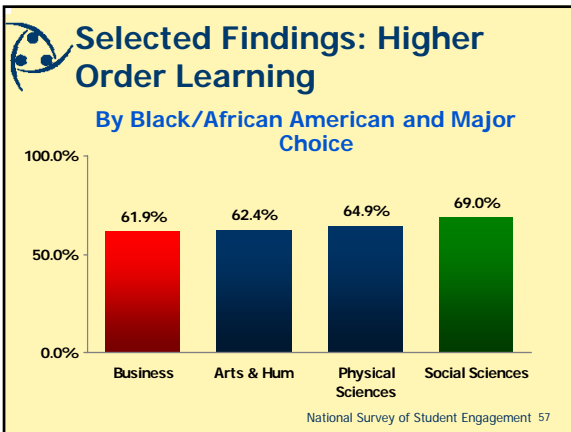












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- Selected Findings: Higher-Order Learning**
- Graduate Assistant for Leadership Development
 - Director of Multicultural Recruitment for the School of Business
- National Survey of Student Engagement 58

**Small Group Activity:
Developing an Action Plan**



Small Group Activity

- Case Study Activity
 - Urban Institution
 - Public Institution
 - Minority Serving Institution
- Consider Selected Findings
 - Reflective learning (major choice, grade level)
 - Integrative learning (trad/non-trad, enrollment)
 - Higher Order learning (major choice, ethnicity/race)

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Small Group Activity

- Questions To Consider
 - What key people (e.g., students, administrators, colleagues) will you include on conversations regarding student learning?
 - What assessments currently exist on your campus that might address this issue?
 - How might these challenges foster or shape deep learning on the DU campus? On your home campus?

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Concluding Thoughts?





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