The Classroom: The Foundation for Student Success

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University of Iowa
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Context

• Global Competitiveness in Degree Attainment
• The New Majority and Demographic Gaps
• Questionable Levels of Graduate Achievement
Context

- Global Competitiveness in Degree Attainment
- The New Majority and Demographic Gaps
- Questionable Levels of Graduate Achievement
- In an Environment of Increasing Fiscal Strain...

→ We Need Higher Levels of Collegiate Achievement
Overview

- 21st century knowledge, skills and competencies
- Today’s students
- Why engagement matters
- Implications for institutional policies and classroom practices
Advance Organizers

- To what extent do your students engage in productive learning activities, inside *and* outside the classroom?
- How do you know?
- What could we do differently -- or better -- to enhance student success?
Student Success in College

Academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and post-college performance
College Learning for the New Global Century

A REPORT FROM THE NATIONAL LEADERSHIP COUNCIL FOR

Liberal Education & America’s Promise

Association of American Colleges and Universities
Narrow Learning is Not Enough—The Essential Learning Outcomes

★ Knowledge of Human Cultures and the Physical & Natural World
★ Intellectual and Practical Skills
★ Personal and Social Responsibility
★ “Deep”/Integrative Learning
Deep/Integrative Learning

- Attend to the underlying meaning of information as well as content
- Integrate and synthesize different ideas, sources of information
- Discern patterns in evidence or phenomena
- Apply knowledge in different situations
- View issues from multiple perspectives
Today’s Students

- Who are they?
- What are they telling us?
Know Your Students

“Part of being a good teacher (not all) is knowing that you always have something new to learn – not so much about teaching techniques but about these particular students at this particular time and their particular set of aspirations, confusions, misconceptions, and ignorance” (Bain, 2004, p.174)
Students Today

An entitlement mentality
Students Today

- An entitlement mentality
- Cumulative deficit re: attitudes, study habits, academic skills
What to Do?!?

Student success requires that professors explain more things to today’s students that we once took for granted –

“You must buy the book, you must read it and come to class, you must observe deadlines or make special arrangements when you miss one”  Prof. Richard Turner (1998, p.4)
Students Today

- More diverse than previous cohorts
- Techno-savvy “NetGens”
- Connected to family
Factors That Threaten Persistence and Graduation from College

- academically underprepared for college-level work
- first-generation college student
- gap between high school and college
- 30+ hours working per week
- part-time enrollment
- single parent
- financially independent
- children at home
What *Really* 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**.

Pascarella & Terenzini, 2005, p. 602
Foundations of Student Engagement

Time on task (Tyler, 1930s)

Quality of effort (Pace, 1960-70s)

Student involvement (Astin, 1984)

Social, academic integration (Tinto, 1987, 1993)

Good practices in undergraduate education (Chickering & Gamson, 1987)

College impact (Pascarella, 1985)

Student engagement (Kuh, 1991, 2005)
Student Engagement Trifecta

- What students *do* -- time and energy devoted to educationally purposeful activities
- What institutions *do* -- using effective educational practices to induce students to do the right things
- Educationally effective institutions channel student energy toward *the right activities*
Good Practices in Undergraduate Education
(Chickering & Gamson, 1987; Pascarella & Terenzini, 2005)

- Student-faculty contact
- Active learning
- Prompt feedback
- Time on task
- High expectations
- Respect for diverse learning styles
- Cooperation among students
National Survey of Student Engagement (pronounced “nessie”)

Community College Survey of Student Engagement (pronounced “cessie”)

College student surveys that assess the extent to which students engage in educational practices associated with high levels of learning and development
NSSE Project Scope

Since 2000:

- 2,000,000+ students from 1,334 different schools
- 80+% of 4-yr U.S. undergraduate FTE
- 50 states, Puerto Rico
- 59 Canadian IHEs
- 100+ consortia
NSSE Questionnaire

Student Behaviors

Institutional Actions & Requirements

Reactions to College

Student Background Information

Student Learning & Development
Effective Educational Practices

- Level of Academic Challenge
- Active & Collaborative Learning
- Enriching Educational Experiences
- Supportive Campus Environment
- Student-Faculty Interaction
Key findings
Grades, persistence, student satisfaction, and engagement go hand in hand
Student engagement varies more *within* than between institutions.
Level of Academic Challenge: Seniors at Doc-Extensive Schools

Percentile 10
Percentile 50
Percentile 90

Doc-Extensive Institutions
Student-Faculty Interaction: First-Year Students at Liberal Arts Institutions

Liberal Arts Institutions

Percentile 10
Percentile 50
Percentile 90
Worth Pondering

How do we reach our least engaged students?
It’s more complicated than this...

- Many of the effects of college are “conditional”
- Some are compensatory
**NSSE: Who’s more engaged?**

- Women
- Fraternity & sorority members
- Full-time students
- Students who live on campus
- Students with diversity experiences
- Students who start and stay at the same school
Impact of Educationally Purposeful Activities on First Academic Year GPA by Pre-College Achievement Level

First-year GPA vs. Educationally Purposeful Activities (standardized)
Impact of Educationally Purposeful Activities on First Academic Year GPA by Race/Ethnicity

First-year GPA

Educationally Purposeful Activities (standardized)

- Hispanic
- White
Impact of Educationally Purposeful Activities on the Probability of Returning for the Second Year of College by Race

- **African American**
- **White/Caucasian**

### Chart Axes
- **Y-Axis:** Probability of Returning
- **X-Axis:** Educationally Purposeful Activities (standardized)
Impact of Pre-College Achievement Level on Probability of Returning for the Second Year of College

Probability of Returning

ACT Score

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
Who’s more engaged?

- Women
- Fraternity & sorority members
- Full-time students
- Students who live on campus
- Students with diversity experiences
- Students who start and stay at same school
- Students who have done “high-impact” practices
High Impact Activities

★ First-Year Seminars and Experiences
★ Common Intellectual Experiences
★ Learning Communities
★ Writing-Intensive Courses
★ Collaborative Assignments and Projects
★ “Science as Science Is Done”; Undergraduate Research
★ Diversity/Global Learning
★ Service Learning, Community-Based Learning
★ Internships
★ Capstone Courses and Projects
Essential Learning Outcome
NSSE Deep/Integrative Learning

- Integrating ideas or information from various sources
- Included diverse perspectives in class discussions/writing
- Put together ideas from different courses
- Discussed ideas with faculty members outside of class
- Discussed ideas with others outside of class
- Analyzing the basic elements of an idea, experience, or theory
- Synthesizing & organizing ideas, info., or experiences
- Making judgments about the value of information
- Applying theories to practical problems or in new situations
- Examined the strengths and weaknesses of your own views
- Tried to better understand someone else's views
- Learned something that changed how you understand an issue
Faculty Survey of Student Engagement (pronounced “fessie”)

FSSE measures faculty expectations and activities related to student engagement in effective educational practices
Course Emphasis

FACULTY report very much or quite a bit of emphasis on memorizing

28% / 19%

STUDENTS report very much or quite a bit of emphasis on memorizing

73% / 62%

Lower Division

Upper Division

1st yr. Students

Seniors
# Effects of Participating in High-Impact Practices on Deep/Integrative Learning and Gains

<table>
<thead>
<tr>
<th></th>
<th>Deep Learning</th>
<th>Gains General</th>
<th>Gains Personal</th>
<th>Gains Practical</th>
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<tbody>
<tr>
<td><strong>First-Year</strong></td>
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<tr>
<td>Learning Communities</td>
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<tr>
<td>Service Learning</td>
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<tr>
<td>Study Abroad</td>
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<tr>
<td>Student-Faculty Research</td>
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<td>Internship</td>
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<td>Service Learning</td>
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<tr>
<td>Senior Culminating Experience</td>
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</tbody>
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+ p < .001, ++ p < .001 & Unstd B > .10, +++ p < .001 & Unstd B > .30
# Effects of Participating in High-Impact Practices on Student Engagement

<table>
<thead>
<tr>
<th></th>
<th>Level of Academic Challenge</th>
<th>Active and Collab. Learning</th>
<th>Student-Faculty Interaction</th>
<th>Supportive Campus Env.</th>
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High-Impact Practices
Increase Odds Students Will:

- Invest time and effort
- Interact with faculty and peers about substantive matters
- Experience diversity
- Get more frequent feedback
Feedback and Deep Learning

Frequency of Prompt Feedback from Faculty

Average Deep Learning

Never | Sometimes | Often | Very often

Seniors
First-Year Students
Prompt Feedback

FACULTY gave prompt feedback often or very often

STUDENTS received prompt feedback often or very often

Lower Division
83% / 85%

Upper Division

1st yr. Students
47% / 56%

Seniors
High-Impact Practices Increase Odds Students Will:

- Invest time and effort
- Interact with faculty and peers about substantive matters
- Experience diversity
- Get more frequent feedback
- Reflect & integrate learning
- Discover relevance of learning through real-world applications
High-Impact Practices and the Disparities Within...

Frosh: Service Learning and LCs

- Parity among racial/ethnic groups
- Fewer 1st gen students
- Fewer part-time students
- Fewer transfer students
- Fewer older students
High-Impact Practices and the Disparities Within…

Seniors in All HIPs

- Fewer 1\textsuperscript{st} gen students
- Fewer students of color
- Fewer transfer students
- Fewer part-time students
- Fewer older students
Assessing Student Engagement in High-Impact Practices

To what extent does your institution provide these experiences?  
[√ = have on campus; √ = required; estimate the % of various student populations in these activities]

<table>
<thead>
<tr>
<th></th>
<th>Learning Community</th>
<th>First Year Seminars</th>
<th>Research w/ Faculty</th>
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<td><strong>On Our Campus</strong></td>
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<tr>
<td>Required for all</td>
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<tr>
<td>% Students involved</td>
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<tr>
<td>% First Generation</td>
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<tr>
<td>% Transfer Students</td>
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<td></td>
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<tr>
<td>% African American</td>
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<td></td>
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<tr>
<td>% Latino Students</td>
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<td></td>
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<tr>
<td>% Asian American</td>
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<td></td>
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<tr>
<td>% other</td>
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<td></td>
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<tr>
<td>% Adult Students</td>
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</tbody>
</table>
Senior Participation in High Impact Activities

- Culminating Senior Experience
- Research with a Faculty Member
- Study Abroad

Average Importance Faculty Placed on the Experience

NSSE and FSSE Data
## Faculty Priorities and Student Engagement

<table>
<thead>
<tr>
<th>AVG FACULTY</th>
<th>Academic challenge</th>
<th>Active-collab</th>
<th>Diversity experiences</th>
<th>Student - faculty</th>
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<tr>
<td>Academic challenge emphasis</td>
<td>✓</td>
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<tr>
<td>Active-collab practices</td>
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<td>✓</td>
<td>✓</td>
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<tr>
<td>Emphasis on diversity experiences</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Emphasis on higher order thinking</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Importance enriching educ experiences</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tbody>
</table>
What to Make of This?

- When faculty members emphasize certain educational practices, students engage in them to a greater extent than their peers elsewhere.
- Good things go together
- Teacher-scholars matter
Practicum, internship, field experience, co-op experience, or clinical assignment

Seniors

- UI: 54%
- AAUDE: 60%
- Carnegie Peers: 59%
- Big Ten+: 61%
- Faculty @ UI: 77%
- FSSE 08: 84%
Learning community

First-Year

- UI: 28%
- AAUDE: 19%
- Carnegie Peers: 18%
- Big Ten+: 15%
- Faculty @ UI: 39%
- FSSE 08: 47%
Research project with a faculty member outside of course requirements

Seniors

<table>
<thead>
<tr>
<th></th>
<th>UI</th>
<th>AAUDE</th>
<th>Carnegie Peers</th>
<th>Big Ten+</th>
<th>Faculty @ UI</th>
<th>FSSE 08</th>
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</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>23%</td>
<td>26%</td>
<td>26%</td>
<td>27%</td>
<td>49%</td>
<td>52%</td>
</tr>
</tbody>
</table>
Foreign language coursework

Seniors

UI: 52%
AAUDE: 56%
Carnegie Peers: 54%
Big Ten+: 60%
Faculty @ UI: 61%
FSSE 08: 56%
Study abroad

Seniors

- UI: 12%
- AAUDE: 22%
- Carnegie Peers: 23%
- Big Ten+: 25%
- Faculty @ UI: 49%
- FSSE 08: 44%
Culminating senior experience (capstone course, senior project/thesis, comp exam)

Seniors

- UI: 19%
- AAUDE: 26%
- Carnegie Peers: 29%
- Big Ten+: 30%
- Faculty @ UI: 70%
- FSSE 08: 83%
If We Could Do Four Things…

1. Make the classroom the locus of community building
2. Use engaging pedagogies campuswide
Classroom Engaging Pedagogies

1. One minute papers (variations)
2. Case studies
3. Debates
4. Small group problem sets...
5. Others
If We Could Do Four Things…

3. Make it possible for every student to do at least one “high-impact” experience in the first year and another later linked to the major.
If We Could Do Four Things...

4. Ensure programs are of high quality.

What is your evidence for effectiveness?
We cannot change the lineage of our students.

Campus cultures do not change easily or willingly.

But we can counter both by using promising policies and practices more consistently throughout the institution to increase the odds that students will succeed.

Do we have the will to do so?
Adler Building at night. Photo: Tom Langdon, UI Foundation.
## Comparison of Distance Education and Campus-Based Learners

<table>
<thead>
<tr>
<th>Gains</th>
<th>First-Year</th>
<th>Senior</th>
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<tbody>
<tr>
<td>Practical competence</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Personal &amp; social development</td>
<td>+</td>
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<tr>
<td>General education</td>
<td>=</td>
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<tr>
<td>Satisfaction</td>
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<td>+</td>
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<tr>
<td></td>
<td>First-Year</td>
<td>Senior</td>
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<tr>
<td><strong>Deep Learning</strong></td>
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<tr>
<td>Higher-order learning</td>
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<tr>
<td>Integrative learning</td>
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<td>=</td>
</tr>
<tr>
<td>Reflective learning</td>
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<td>+</td>
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Comparison of Distance Education and Campus-Based Learners