What Matters to Student Success: The Promise of High-Impact Practices

George D. Kuh

NMHEAR Conference
Albuquerque NM
February 28, 2013
Overview

- High impact practices: what they are, why they matter and who benefits
- Implications
High-Impact Activities

- What are examples of high impact activities at your institution?
- How do you know they are high impact?
- How many and what types of students participate?
- What would it take for every first year student and every later year student to do a high impact activity?
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-university performance
Early Indicators of University Persistence and Success

- Goal realization
- Psycho-social fit
- Credit hours completed
- Academic and social support
- Involvement in the “right” kinds of activities
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
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 Clusters of Effective Educational Practices

- Level of Academic Challenge
- Enriching Educational Experiences
- Active & Collaborative Learning
- Supportive Campus Environment
- Student-Faculty Interaction
Remember, as bad as this is, it's better than the essay question.
Grades, persistence, student satisfaction, gains across a range of desired outcomes, and engagement go hand in hand
Creating Conditions That Matter to Student Success

We can’t leave serendipity to chance
High-Impact Educational Practices

What they are, who has access to them, and why they matter

By George D. Kuh

With an introduction by Carol Gaye Schneider and findings on student success from AAC&U’s LEAP initiative

www.aacu.org
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
Graduation Rates by Ethnicity and Participation in High-Impact Practices

Source: CSU Northridge Institutional Research
August, 2010

Latino/a

0 38%
1 49%
2 65%
3+ 73%

not Latino/a

0 55%
1 63%
2 68%
3+ 69%
Employers assess the potential value of high-impact educational practices

<table>
<thead>
<tr>
<th>% saying each would help a lot/fair amount to prepare college students for success</th>
</tr>
</thead>
<tbody>
<tr>
<td>84% Students complete a significant project before graduation that demonstrates their depth of knowledge in their major AND their acquisition of analytical, problem-solving, and communication skills (62% help a lot)</td>
</tr>
<tr>
<td>81% Students complete an internship or community-based field project to connect classroom learning with real-world experiences (66%)</td>
</tr>
<tr>
<td>81% Students develop research skills appropriate to their field and develop evidence-based analyses (57%)</td>
</tr>
<tr>
<td>73% Students work through ethical issues and debates to form their own judgments (48%)</td>
</tr>
</tbody>
</table>
Common Intellectual Experiences

When students read and write or conduct inquiries about the same material, they are more likely to:

- talk about substantive matters outside of class
- study together
- see connections between different courses
- integrate and synthesize material
Learning Communities

- Formal program where groups of students (FY) take two or more classes together
- LC programs that integrate material across courses are associated with greater student engagement and learning
First-Year Student Number of Hours Studying by Learning Community Status

<table>
<thead>
<tr>
<th>Hours</th>
<th>LC</th>
<th>Non-LC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Service Learning

- Community-based project as part of a regular course
- Positively associated with deep learning and personal development
Majority utilized existing info (libraries, WWW), and almost half worked in laboratory and fieldwork settings

Reviewing literature and interpreting findings most closely related to deep learning

Data collection had the weakest relationship
Study Abroad

- Positively related to engagement and learning outcomes upon return to home campus
- Living with host nationals related to more integrative and reflective learning, and personal and social gains
- Length of time spent abroad did not make a difference
Culminating Activities

- Capstone course, senior project or thesis, comprehensive exam, field placement
- A third (32%) of seniors reported having completed such an experience
- Another 29% said they planned to do so before graduating
**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
### Effects of Participating in High-Impact Activities 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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First-Year</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning Communities</td>
<td>+++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Service Learning</td>
<td>+++</td>
<td>++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study Abroad</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Student-Faculty Research</td>
<td>+++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Internship</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Service Learning</td>
<td>+++</td>
<td>++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Culminating Experience</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
</tr>
</tbody>
</table>

+ p < .001, ++ p < .001 & Unstd B > .10, +++ p < .001 & Unstd B > .30
## Effects of Participating in High-Impact Activities on Student Engagement

<table>
<thead>
<tr>
<th>Activity</th>
<th>First-Year</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Communities</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Service Learning</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>Student-Faculty Research</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Internship</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Service Learning</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Culminating Experience</td>
<td>++</td>
<td>++</td>
<td>+++</td>
<td>++</td>
</tr>
</tbody>
</table>

*p < .001, ++ p < .001 & Unstd B > .10, +++ p < .001 & Unstd B > .30*
High-Impact Activities
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
Impact of High-Impact Activities Enhanced When:

- Structure and expectations set at appropriately high levels
- 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
- Publicly demonstrate competence
Keep in Mind…

- More college experiences can be or are “high impact” in addition to those on the AAC&U list
- Implementation quality matters!
Features of Effective Learning Communities

- Students co-enrolled in two or more linked courses
- One course is writing- or inquiry-intensive or has service learning component
- Instructors collaborate/coordinate activities
- Assignments that require synthesis and integration of material from linked courses
- Instructional team includes peer preceptor who facilitates out-of-class activities
- Participants (students, peer mentor) live on campus in close proximity
- Instructor is LC students academic advisor for first year
Features of Effective Student-Faculty Research

- Faculty/staff member provides structure and feedback throughout
- Students participate in entire inquiry cycle
  - Identify problem to be investigated
  - Flesh out research questions
  - Help review related literature
  - Help design and assist with data collection
  - Help design and conduct data analysis
  - Help write up findings and implications
  - Present study/project to others
  - Co-author papers
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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On Our Campus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Required for all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Students involved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% First Generation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Transfer Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% African American</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Latino Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Asian American</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Adult Students</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Keep in Mind…

✔ More college experiences can be or are high impact in addition to those on the AAC&U list

✔ Implementation quality matters!

✔ Implications for advising

✔ The characteristics of high-impact activities can be infused into any classroom, lab, studio or other learning setting
What If ...

Every student had at least one “high-impact” experience in the first year and another later linked to the major
What if...

We made student employment a high-impact activity.
Supervisors had two structured conversations with every student employee during spring semester and coded conversations into the following categories:

- How the job and academics complement each other ("How is your job fitting in with your academics?")
- Transfer between work and academics ("What are you learning here at work that is helping you in school?")
- Transfer between academics and work ("Are you learning anything in class that you can apply here at work?")
- Transfer between work and future career ("Give me a couple of examples of things that you are learning here at work that you will be using in your future profession?")
U of Iowa Student Employment Project
“Guided Reflection on Work” (GROW)

- Student Employment Survey used to examine differences between pilot and non-pilot participants.
## Student Employment Outcomes: “Guided Reflection on Work” (GROW)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>% agree/strongly agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pilot Participants</td>
<td>Non-Pilot</td>
</tr>
<tr>
<td>My supervisor helps me make connections between my work and my life as</td>
<td>60%</td>
<td>51%</td>
</tr>
<tr>
<td>a student.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job has helped prepare me for the world of full-time work.</td>
<td>62%</td>
<td>51%</td>
</tr>
<tr>
<td>My job has helped me improve my written communications.</td>
<td>16%</td>
<td>21%</td>
</tr>
</tbody>
</table>
### Student Employment Outcomes: “Guided Reflection on Work” (GROW)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>% agree/strongly agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pilot Participants</td>
<td>Non-Pilot</td>
</tr>
<tr>
<td>I can see connections between my job and my major/coursework.</td>
<td>56%</td>
<td>36%</td>
</tr>
<tr>
<td>My job has helped me learn about career options.</td>
<td>30%</td>
<td>39%</td>
</tr>
</tbody>
</table>
**Student Employment Outcomes:**
“Guided Reflection on Work” (GROW)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>% agree/strongly agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pilot Participants</td>
<td>Non-Pilot</td>
</tr>
<tr>
<td>Because of my job, I am able to work effectively with individuals with a variety of backgrounds, experiences, and cultures.</td>
<td>82%</td>
<td>77%</td>
</tr>
<tr>
<td>My job has helped me use critical thinking skills</td>
<td>70%</td>
<td>57%</td>
</tr>
</tbody>
</table>
## Student Employment Outcomes: “Guided Reflection on Work” (GROW)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>% agree/strongly agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pilot Participants</strong></td>
<td>Pilot</td>
<td>Non-Pilot</td>
</tr>
<tr>
<td>My job helped me develop more effective time management skills.</td>
<td>76%</td>
<td>76%</td>
</tr>
<tr>
<td>My job helped me improve my oral communication skills.</td>
<td>78%</td>
<td>72%</td>
</tr>
<tr>
<td>My job helped me develop conflict resolution skills.</td>
<td>74%</td>
<td>61%</td>
</tr>
</tbody>
</table>
High-Impact Activities

- What are examples of high impact activities at your institution?
- How do you know they are high impact?
- How many and what types of students participate?
- What would it take for every first year student and every later year student to do a high impact activity?
Questions & Discussion
Don't EVER give up!