The Promise of High-Impact Practices

George D. Kuh

University of Buffalo
November 14, 2014
We all want the same thing—an undergraduate experience that results in high levels of learning and personal development for all students.
The Major Tasks

Teach students to:

- **Reflect** – think about their thinking and experiences in and out of the classroom, on and off the campus

- **Integrate** – connect and grasp the relevance of what they are learning from different courses, out-of-class experiences, and life beyond the institution

- **Apply** – transfer and use what one has learned in different settings that present novel challenges and opportunities
Advance Organizers

- What practices are you currently using that are promising? How do you know?
- What additional promising practices would make sense to implement?
- What obstacles must be overcome or additional resources needed to insure promising practices are effective?
- What else do you need to know and do to increase the quality of your work with students?
Overview

- What the world needs now
- Why engagement and high-impact practices matter
- Four priorities
- Discussion
Economy Defined by Greater Workplace Challenges and Dynamism

- More than 1/3 of the entire US labor force changes jobs *annually*.
- Today's students will have 10-14 jobs *by age 38*!
- Half of workers have been with their company less than 5 years.
- Every year, more than 30 million Americans are working in jobs that did not exist in the previous year.

DOL-BLS
The World is Demanding More

- ...more workers with postsecondary credentials
- ...more educated workers with higher levels of learning and knowledge
Our company puts a priority on hiring people with the intellectual and interpersonal skills that will help them contribute to innovation in the workplace.

Candidates’ demonstrated capacity to think critically, communicate clearly, & solve complex problems is more important than their undergraduate major.

Our company is asking employees to take on more responsibilities and to use a broader set of skills than in the past.

Innovation is essential to our company/organization’s continued success.

The challenges employees face within our company are more complex today than they were in the past.
Key Capabilities Open the Door for Career Success and Earnings

“Irrespective of college major or institutional selectivity, what matters to career success is students’ development of a broad set of cross-cutting capacities…”

Anthony Carnevale, Georgetown University Center on Education and the Workforce
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
Early College Indicators of 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
It Takes a Whole Campus to Educate a Student
Something Else That Really Matters in College

The greatest impact appears to stem from students’ total level of campus engagement, particularly when academic, interpersonal, and extracurricular involvements are mutually reinforcing...

Pascarella & Terenzini, 2005, p. 647
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/staff contact
- Active learning
- Prompt feedback
- Time on task
- High expectations
- Respect for diverse learning styles
- Cooperation among students
College student surveys that assess the extent to which students engage in educational practices associated with high levels of learning and development.
Grades, persistence, student satisfaction, gains across a range of desired outcomes, and engagement go hand in hand.
It’s more complicated than this...

- Many of the effects of college are “conditional”
- Some are compensatory
- Some have unusually positive effects – high impact practices
AAC&U HIPs Resources

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 Geary Schneider and findings on student success from AAC&U’s LEAP Initiative

Ensuring Quality & Taking High-Impact Practices to Scale
By George D. Kuh and Ken O’Donnell
With case studies by Sally Reed
AAC&U HIPs Resources
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
## Effects of Participating in High-Impact Activities on Deep/Integrative Learning and Gains

<table>
<thead>
<tr>
<th>Activity</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></th>
<th>Level of Academic Challenge</th>
<th>Active and Collaborative Learning</th>
<th>Student-Faculty Interaction</th>
<th>Supportive Campus Env.</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
Avg % Gains for Participation in Multiple HIPs vs. No Participation (by Race)

- **Afr. Amer**: 11%, 21%, 10%, 10%, 11%, 17%, 12%, 25%, 27%
- **Asian Amer**: 27%, 10%, 23%, 26%, 25%, 35%, 37%
- **Hispanic**: 47%
- **White**: 37%
Avg % Gains by Participation in Multiple HIPs vs. No Participation by First-Generation & Transfer Status

<table>
<thead>
<tr>
<th>Participation Level</th>
<th>First-Gen</th>
<th>Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 HIPs</td>
<td>11%</td>
<td>24%</td>
</tr>
<tr>
<td>3-4 HIPs</td>
<td>14%</td>
<td>26%</td>
</tr>
<tr>
<td>5-6 HIPs</td>
<td>35%</td>
<td>40%</td>
</tr>
</tbody>
</table>
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
Percentage of Academic Staff Indicating Activity is Important

- Learning community: 53%
- Research with staff: 56%
- Study abroad: 44%
- Culminating experience: 85%
Seniors Participation in High Impact Activities

- Culminating Experience
- Research with a Staff Member
- Learning Community

Percentage of Seniors Who Had the Experience

Average Importance Staff Place on the Experience

NSSE and FSSE Data
Impact of High-Impact Activities Enhanced When Students:

✓ Strive to reach expectations set at appropriately high levels
✓ 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
✓ Demonstrate competence publicly
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
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 older students
High-Impact Practices and the Disparities Within…

Seniors in All HIPs

✓ Fewer 1<sup>st</sup> gen students
✓ Fewer students of color
✓ Fewer part-time students
✓ Fewer older students
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
Creating Conditions That Matter to Student Success

We can’t leave serendipity to chance
Implications

1. Put money where it makes a difference to student success.

*It’s not* **how much** **you spend** but **where**
(DEEP study, Delta Cost Project, Cornell studies)
Occasional Paper #3

Connecting the Dots Between Learning and Resources

Jane V. Wellman

1. Intentionality matters as much or more than money alone

2. Spending on instruction and student services pays off in learning, persistence, and graduation

www.learningoutcomeassessment.org/OccasionalPapers.htm
Investing in Success
COST-EFFECTIVE STRATEGIES TO INCREASE STUDENT SUCCESS
BY JANE WELLMAN AND RIMA BRUSI
AAC&U HIPs Resources
Implications

2. Sunset redundant and less effective programs

3. Have every student do (at least) one high-quality “high-impact” experience in the first year and another later linked to the major
Graduation Rates by Ethnicity and Participation in High-Impact Practices

Source: CSU Northridge Institutional Research August, 2010

<table>
<thead>
<tr>
<th>Latino/a</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38%</td>
<td>49%</td>
<td>65%</td>
<td>73%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>not Latino/a</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55%</td>
<td>63%</td>
<td>68%</td>
<td>69%</td>
</tr>
</tbody>
</table>
Employers assess the potential value of high-impact educational practices

| % saying each would help a lot/fair amount to prepare college students for success |
|----------------------------------|----------------------------------------------------------------------------------|
| **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)* |
| **81%**                          | Students complete an internship or community-based field project to connect classroom learning with real-world experiences *(66%)* |
| **81%**                          | Students develop research skills appropriate to their field and develop evidence-based analyses *(57%)* |
| **73%**                          | Students work through ethical issues and debates to form their own judgments *(48%)* |
Implications

4. Make work something akin to 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?")
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>My supervisor helps me make connections between my work and my life as a student.</td>
<td>60%</td>
<td>3.8</td>
</tr>
<tr>
<td>My job has helped prepare me for the world of full-time work.</td>
<td>62%</td>
<td>3.6</td>
</tr>
<tr>
<td>My job has helped me improve my written communications.</td>
<td>16%</td>
<td>2.6</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>
Implications

1. Put money where it makes a difference to student success.

2. Sunset redundant, ineffective programs

3. Have every student do (at least) one high-quality “high-impact” experience in the first year and another linked to the major

4. Make work a high-impact activity
Homework

- What practices are you currently using that are promising?
- What additional promising practices would make sense to implement?
- What obstacles must be overcome or additional resources needed to insure promising practices are effective?
- What else do you need to know and do to increase the quality of your work or contacts with students?
The things we have to learn before we do them, we learn by doing them.

Aristotle, *Nicomachean Ethics*
May the Force be with us
Questions & Discussion