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

George D. Kuh
Saint Louis University
St. Louis, MO
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We all want the same thing—an undergraduate experience that results in high levels of learning and personal development for all students.
Are We What We Should Be?

What if…

✓ We imagined what our work would be like using what we know about how students learn and develop…?

✓ And we created optimum learning conditions for all students…?

✓ Then, how would we re-design our policies, programs and practices?
The Major Tasks

Teach students to:

- **Reflect** – on their experiences inside and outside the classroom

- **Integrate** – see the connections between different courses, out-of-class experiences, and life beyond the institution

- **Apply** – use what one has learned in different settings presenting novel challenges and opportunities
Ponder This...

For what shall SLU be known?

“Challenged by outstanding faculty and a modern, value-centered curriculum reflecting the Jesuit tradition, students are fully prepared to contribute to society and to be effective leaders of social change based on the ethical values and principles taught in the Saint Louis University tradition…”

Lawrence Biondi, S.J.
Overview

- What the world needs now
- Why engagement and high-impact practices matter
- Five priorities
- Discussion and next steps
US 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 college-educated workers.

➢ ...more educated workers with *higher levels of learning and knowledge.*
Employer expectations of employees have increased

% who agree with each statement

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

91%

Employees are expected to work harder to coordinate with other departments than in the past

90%

The challenges employees face within our company are more complex today than they were in the past

88%

To succeed in our company, employees need higher levels of learning and knowledge today than they did in the past

88%
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
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 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
Who’s (on average) more engaged?

- Women
- 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

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

- Probability of Returning
- Educationally Purposeful Activities (standardized)

Legend:
- Blue line: African American
- Red line: White/Caucasian
Impact of Pre-College Achievement Level on Probability of Returning for the Second Year of College

Probability of Returning

ACT Score
Who’s more engaged?

- Women
- 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 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

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
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
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>
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<tbody>
<tr>
<td><strong>First-Year</strong></td>
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<tr>
<td>Learning Communities</td>
<td>+++</td>
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<tr>
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<tr>
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<tr>
<td>Study Abroad</td>
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<tr>
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<tr>
<td>Culminating Experience</td>
<td>++</td>
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# Effects of Participating in High-Impact Activities 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 Activities
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

<table>
<thead>
<tr>
<th>Frequency of Feedback</th>
<th>Average Deep Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td></td>
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<tr>
<td>Often</td>
<td></td>
</tr>
<tr>
<td>Very often</td>
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National Survey of Student Engagement
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
✓ Public demonstration of competence
Creating Conditions That Matter to Student Success

We can’t leave serendipity to chance
Five Priorities

1. Insist on doing what works
Engaging Pedagogies and Practices

a. Classroom organization
b. Early and continuing assignments requiring reflection and integration coupled with feedback
c. Use of peer preceptors/mentors
d. One minute papers (variations)
e. Case studies
f. Debates
g. Simulations
h. Small group problem sets
i. Others…
2. 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

With all the talk about the need for more accountability, surprisingly little is known about what kind of resources an institution needs in order to produce a given level of student attainment.

www.learningoutcomeassessment.org/OccasionalPapers.htm
Wellman’s Conclusions

- Intentionality matters as much or more than money alone
- Spending on instruction and student services pays off in learning, retention and graduation
- Excess units cost institutions money, cost students in time and money, and do not get students to the finish line
Five Priorities

1. Insist on doing what works
2. Put money where it makes a difference to student success.
3. Sunset redundant and ineffective programs; scale up demonstrably effective ones.
4. Have every student do (at least) one high-quality “high-impact” experience in the first year and another linked to the major
Graduation Rates by Ethnicity and Participation in High-Impact Practices

Source: CSU Northridge Institutional Research
August, 2010
## 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>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>84%</strong></td>
<td>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 <em>(62% help a lot)</em></td>
</tr>
<tr>
<td><strong>81%</strong></td>
<td>Students complete an internship or community-based field project to connect classroom learning with real-world experiences <em>(66%)</em></td>
</tr>
<tr>
<td><strong>81%</strong></td>
<td>Students develop research skills appropriate to their field and develop evidence-based analyses <em>(57%)</em></td>
</tr>
<tr>
<td><strong>73%</strong></td>
<td>Students work through ethical issues and debates to form their own judgments <em>(48%)</em></td>
</tr>
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Five Priorities

5. Make work a high-impact activity.
U of Iowa Student Employment Project “Guided Reflection on Work” (GROW)

- Supervisors from Student Health Service/, Housing, Iowa Memorial Union, Libraries
- Supervisors received one hour of training on:
  - Outcomes of student employment
  - Results from the previous year’s Division of Student Services Student Employment Survey
  - Background on the role supervisors can play in helping students make connections between work and academics
  - Expectations for the Pilot Projects
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>
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<th>Outcome</th>
<th>% agree/strongly agree</th>
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<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 a student.</td>
<td>60%</td>
<td>51%</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>
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## Student Employment Outcomes: “Guided Reflection on Work” (GROW)

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<td>Pilot Participants</td>
<td>Non-Pilot</td>
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<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>
<tr>
<td>Outcome</td>
<td>% agree/strongly agree</td>
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<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------</td>
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<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</td>
<td>82%</td>
<td>77%</td>
</tr>
<tr>
<td>a variety of backgrounds, experiences, and cultures.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job has helped me use critical thinking skills</td>
<td>70%</td>
<td>57%</td>
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### Student Employment Outcomes: “Guided Reflection on Work” (GROW)

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<td>Non-Pilot</td>
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<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>
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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 1\textsuperscript{st} gen students
- Fewer part-time students
- Fewer transfer students
- Fewer older students
High-Impact Practices and the Disparities Within...

Seniors in All HIPs

✓ Fewer 1st gen students
✓ Fewer students of color
✓ Fewer transfer students
✓ 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
Characteristics of High-Impact Activities

- Strive to reach 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
- Demonstrate competence
Ponder This

1. What high-impact practices (HIPs) are available in my unit and which students do them?
2. Are our HIPs designed for and available only to our majors? Should they be?
3. Do students know about the HIPs available at SLU? How do they learn about them?
4. How do we know our HIPs are effective? What is the evidence?
The Major Tasks

Teach students to:

- **Reflect** – on their experiences inside and outside the classroom
- **Integrate** – see the connections between different courses, out-of-class experiences, and life beyond the institution
- **Apply** – use what one has learned in different settings presenting novel challenges and opportunities
The things we have to learn before we do them, we learn by doing them.

Aristotle, *Nicomachean Ethics*
Questions & Discussion