Developing and Assessing High Impact Educational Programs to Support First Year Student Learning and Success
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What We Know About Student Success:

- Student success in college is no accident.
- Student engagement in intentionally designed educationally purposeful activities is necessary to achieve desirable learning outcomes.
- Institutions must deploy resources appropriately and provide students explicit messages about success-oriented behaviors.
- Institutions need information about how well they’re doing & to use this information to enhance student engagement & success.

Sources

- National Survey of Student Engagement (NSSE) – results from first-year students & seniors at 1,300 institutions
- Student Success in College (2005) – documents what 20 high-performing institutions do to promote student success

New Markers for Student Success

- More comprehensive framework for judging student success is needed
  - How students spend their educational time in college
  - How frequently, and with what results, do students engage in educational practices—curricular, co-curricular, and pedagogical—that provide them opportunities to develop the learning they need
- Persistence still counts, but a contemporary framework for student success needs to address both student learning outcomes and the kinds of practices that foster intended outcomes.

Findings from NSSE and AAC&U:

Some Educational Activities are Unusually Effective

Growing evidence that “high-impact practices” provide substantial educational benefits to students

High-Impact Practices

Educational experiences that make a significant difference to student persistence, learning outcomes, and student success.

1. Structural features
2. Pedagogical practices for all classrooms
High Impact Activities

- First-Year Seminars and Experiences
- Common Intellectual Experiences
- Learning Communities
- Writing-Intensive Courses
- Collaborative Assignments and Projects
- Undergraduate Research
- Diversity/Global Learning
- Service Learning, Community-Based Learning
- Internships
- Capstone Courses and Projects

NSSE Finding: Value of High-Impact Practices

Students who took part in one or more “high-impact” practice such as a learning community, research with faculty, study abroad, and culminating senior experience reported greater levels of deep learning and greater gains in learning and personal development.

NSSE Deep/Integrative Approaches to 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 Practices on Deep/Integrative Learning and Gains

<table>
<thead>
<tr>
<th>Practice</th>
<th>Deep Learning</th>
<th>Gains General</th>
<th>Gains Personal</th>
<th>Gains Practical</th>
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* + p < .05, ++ p < .01 & Unstd B > .30, +++ p < .001 & Unstd B > .50

Strong Positive Effects of High-Impact Activities

- Self-reported gains in 3 clusters of learning & personal development outcomes, & in engaging in deep approaches to learning
- In contrast to surface-level learning, deep-level processing emphasizes acquiring information and understanding the underlying meaning of information. Students who use deep approaches earn higher grades and retain, integrate, and transfer information at higher rates.
- Students who have these experiences are also more engaged in all practices measured on NSSE

Highlights: High-Impact Practices in the First Year

- **Learning communities.** Most positive structures include: integrated assignments, activities, or discussion groups; peer mentors; required out-of-class activities.
- **First Year Seminar.** Research about what works from The National Resource Center for The First-Year Experience and Students in Transition
- **Service learning.** Most beneficial when connected to course; particularly within learning community; most powerful as community-based research.
Discussion:

What is it about these magical, high-impact activities that appear to be so effective with students?

Marked by 6 Conditions

1. Time on Task
   - Activities demand students devote considerable time & effort to purposeful tasks.
   - Most require daily decisions that deepen students’ investment in the activity.

2. Faculty and Peer Interaction
   - Nature of activities puts students in circumstances that essentially demand interaction with faculty and peers about substantive matters over a period of time.

3. Interaction with Diversity
   - Participation increases the likelihood that students will experience diversity through interaction with people who are different from themselves. Students are challenged to develop new ways of thinking & responding to novel circumstances.

4. Frequent Feedback
   - May be faculty, internship supervisors, peers, others. Close proximity may provide opportunities for nearly continuous feedback.

5. Connections between learning context and real-world settings
   - Opportunities for students to see how what they are learning works in on and off campus settings.

6. Occur in context of Coherent, Academically Challenging Curriculum
   - Infused with opportunities for active, collaborative learning. Students better understand themselves in relation to others and the larger world.

To Ponder...

1. How might you ensure that these conditions are more a part of your first-year experience program?

Summary: Benefits of High-Impact Structural features and Pedagogical practices

1. High-impact practices correlated highly with NSSE Educational Gains scales (general education, personal and practical gains), Deep Learning measures, and overall engagement.

2. Engagement in range of effective educational practices (classroom based) provides Compensatory Benefit for First Year Students With Lower Entering Board Scores (ACT) and students from historically-underrepresented populations

What is Student Engagement?

Student engagement: a domain of constructs that measures the time and energy students devote to educationally purposeful activities, and how students perceive facets of the institutional environment that facilitate and support their learning.


Results: Engagement & Retention

1. Engagement in the first year is essential to student persistence & success
2. Some students appear to benefit more than others from the same educational programs or practices

Effect of Engagement on FY GPA by ACT scores

Educational Activities that Matter to Success in the First Year

NSSE items, Educationally Purposeful Activities:
- Asked questions in class or contributed to class discussions
- Made a class presentation
- Prepared two or more drafts of a paper or assignment
- Worked with other students on projects during class
- Worked with classmates outside of class on assignments
- Tutored or taught other students (paid or voluntary)
- Participated in a community-based project as part of course
- Talked about career plans with a faculty member or advisor
- Discussed ideas from readings/classes with faculty outside class
- Received prompt feedback on your academic performance
- Worked harder than you thought
- Worked with faculty on activities outside coursework (committees, student life, etc.)
- Discussed ideas from readings/classes with others
- Had serious conversations with students of a different race or ethnicity and those who differ from you—religious beliefs, political opinions, or personal values

Compensatory Effect of Engagement

- Student engagement positively related to student grades and to persistence for all students
- Engagement has compensatory effect on FY grades & persistence to the second year -- Historically underserved students tend to benefit more from engagement than majority students.
**To Ponder...**

1. How might you develop HIPs and ensure students take part?

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**High Impact Educational Programs in Practice: IUPUI**

- Indiana University – Purdue University Indianapolis (IUPUI)
  - Downtown Indianapolis
  - Public comprehensive four year institution
  - Over 185 academic programs
  - Doctoral/Research Intensive

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**IUPUI Students**

**Student Profile:**
- 18,305 full-time students
- 11,549 part-time students
- 57.9% female; 42.1% male
- Students from 50 states; 122 countries; all 92 Indiana counties
- 53% under 25 years of age
- About 59% are first generation
- Around 70% work more than 30 hours a week

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**IUPUI University College**

University College is the academic unit at IUPUI that provides a common gateway to the academic programs available to entering students.

University College coordinates existing university resources and develops new initiatives to promote academic excellence and enhance student persistence.

It provides a setting where faculty, staff, and students share in the responsibility for making IUPUI a supportive and challenging environment for learning.

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**Supporting First Year Students at IUPUI**

- RISE to the IUPUI Challenge
- Personal Development Plans
- First Year Seminars
- Themed Learning Communities

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**RISE to the Challenge**

- IUPUI developed goals for excellence in:
  - Teaching and learning
  - Research, scholarship, and creative activity
  - Civic engagement

- Consistent with those goals, IUPUI is challenging each student to have at least two curricular learning experiences that augment the typical curriculum and that fall within the four areas of curricular excellence that are consistent with the mission of IUPUI.
RISE to the IUPUI Challenge

- Research
- International Study Abroad
- Service Learning
- Experiential Learning

The challenge: Every student earning a bachelor’s degree will complete at least two of the four types of educational experiences which qualify for appearing on the student’s transcript.

Why RISE?

- RISE emphasizes four critical dimensions of experiential learning that are the hallmarks of an IUPUI degree—integrating important high impact programs into the student experience in an intentional way.
- RISE will brand an IUPUI degree as unique and in touch with “Employer Identified Skills” for new graduates (AAC &U, 2007) and will be an integral part of “My IUPUI Experience.”

My IUPUI Experience

IUPUI Personal Development Plan (PDP)

Personal development planning is a process which will enable first year students at IUPUI to understand, implement, and mark progress toward a degree and career goal by creating and following a personalized plan that is open to revision and reevaluation every semester in collaboration with an academic advisor or faculty member.

The PDP is designed to foster:

1. Goal commitment (student commitment to earning a degree)
2. Academic achievement (through goal setting and planning)
3. Curricular coherence and meaning in the first-year seminar
4. Student development for students in the first year and beyond.

PDP Components

Each PDP will have three components:

1. Semester in Review – reflection on individual strengths, goals, challenges and strategies for success
2. Principles of Undergraduate Learning – identification of how the PULs are connected to academic and career goals
3. Peak Performance Plan – A plan for specific action steps, courses, and experiential activities leading to the achievement of academic and career goals
First Year Seminars at IUPUI
• Facilitate student transition to college by introducing key information and skills needed to succeed and by offering opportunities to connect with faculty, staff, and other students.
• First year seminar is taught by an instructional team including a faculty member, academic advisor, librarian and student mentor
• Where first year students are introduced to the Personal Development Plans

IUPUI Themed Learning Communities (TLCs)

What is a Themed Learning Community (TLC)?
• 3 or more linked courses including an integrative first year seminar connected through an interdisciplinary theme.
• Faculty and instructional team members work together to integrate the curricula
• Involve exciting opportunities to integrate high impact programs in a meaningful way into the first-year curriculum.

Growth of Themed Learning Communities at IUPUI
• 2003: 7 TLCs
• 2007: 26 TLCs
• 2008: 30 TLCs
• 2009: 33 TLCs, across 12 academic schools

Experiential Learning in TLCs at IUPUI
• Museums (Eiteljorg, IMA, Indiana State Museum, Freedom Center)
• Plays (at the Madame Walker Theater, IRT and more)
• Community Festivals
• Visiting a local mosque during Ramadan
• Participating in a live global discussion with Israel
• Interviewing with Channel 8 News

Examples of Undergraduate Research in TLCs
• “Our Chemical World”
  First-year students will be paired with science faculty conducting research.
• “It’s Not Easy Being Green”
  First-year students will conduct research project on environmental issue in Indianapolis under the guidance of faculty researchers.
Service Learning in TLCs

<table>
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<th>33% Include Service Learning</th>
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<td>24% Include One Time Service Projects</td>
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- 3 Education TLCs
- 3 Nursing TLCs
- 2 SPEA TLCs
- 2 University College TLCs
- 1 Liberal Arts TLC
- 2 Engineering TLCs
- 2 Liberal Arts TLCs
- 2 Psychology TLCs
- 2 University College TLCs

Introduction to study abroad/ international efforts

15% of 2009 TLCs using Global Crossroads.

Student Success from the TLCs

First Semester GPA

- TLC participants: 2.79
- Non-participants: 2.55

- GPA 3.0 or above: 43%
- GPA 3.5 or above: 22%

First Semester Retention

- TLC participants: 76%
- Non-participants: 67%

*adjusted to control for significant covariates including: course load, gender, ethnicity, SAT scores, high school percentiles, units of high school math, and first-generation status.

What to do??

Make it possible for every student to participate in at least two high impact activities

- One in First Year
  - FY seminars
  - Learning communities
  - Service learning
- One Later in Major
  - Study abroad
  - Student-faculty research
  - Field placement or internship
  - Capstone project

Do All Students Experience High-Impact Practices?

- **Nope.** High Impact Practices Only Reach A Fraction of Students
  - **Participation Levels:**
    - First Year Students:
      - Learning Communities: 17%
      - Service Learning: 36%
    - Seniors:
      - Research With Faculty: 19%
      - Internship: 53%
      - Study Abroad: 19%

First-generation, racial-ethnic, major differences too

How might we ensure all students have these powerful experiences??

As you move to consider high-impact practices...

1. How often are students experiencing high-impact practices?
2. Do all students have an equal likelihood of participating?
3. Are these practices done well?