Student Success in College: The Promise of High-Impact Practices

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The Major Tasks

Teach students to:

- **Reflect** – on their experiences inside and outside the classroom
- **Integrate** – see the connections between different classes, out-of-class experiences, and life beyond the institution
- **Apply** – use what one has learned in different settings presenting novel challenges and opportunities
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 inside and outside the classroom for all our students…?
- Then, how would you re-design your classroom? Program? Institution?
- What kinds of programs and services would we provide?
Ponder This

❖ What practices are you currently using that are promising?
❖ What additional effective practices might you use?
❖ What obstacles must be overcome to use effective educational practices more often in your classes?
❖ What else do you need to know and be able to do to better prepare your students for postsecondary success?
Overview

- What the world needs now
- Why student engagement matters
- High-impact practices
- Discussion
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.
The World is Demanding More

➢ There is a demand for more college educated workers.

➢ There is also a demand that those educated workers have 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% of employees agree

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

- 90% of employees agree

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

- 88% of employees agree

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

- 88% of employees agree
Why the Need for Higher Levels of Learning?

- In a globalized knowledge economy, the capacity to drive innovation is the key strategic economic advantage.
- Rapid scientific and technological innovations are changing the workplace and demanding more of all employees.
- Global interdependence and complex cross-cultural interactions increasingly define modern society and the workplace and call for new levels of knowledge and capability.
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
Student Success

Academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and post-college performance
What Matters to Student Success

College Experience

- Economic Forces
- Globalism
- State Policy

Student Behaviors
- Study Habits
- Peer Involvement
- Interaction with Faculty
- Time on Task
- Motivation
- Other

Student Engagement
- First Year Experience
- Academic Support
- Campus Environment
- Peer Support
- Teaching & Learning Approaches
- Other

Institutional Conditions
- Remediation: Work off Campus
- Financial Aid & Policies

Post College Outcomes
- Employment
- Graduate & Professional School
- Lifelong Learning
- Transfer
- Grades & Graduation
- Student Learning Gains

Pre-College Experiences
- Attitude
- College Readiness
- Family & Peer Support
- Motivation to Learn
- Demographics: race, gender, SES

Accountability
- Federal Policy
- Demographics
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)
Factors That Threaten Persistence and Graduation from College

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

Which group has the lowest expectations for student academic performance?

(a) students  (b) peers  (c) parents  (d) teachers

d. teachers
Principles for Strengthening Pre-College Preparation

- Expect that all underserved students are capable of being prepared to enroll and succeed in college.
- Provide a range of high-quality college preparatory tools for underserved students and their families.
- Embrace social, cultural, and learning style differences in developing learning environments and activities for underserved students.
- Involve leaders at all levels in establishing policies, programs, and practices that facilitate student transitions.
- Provide sufficient financial and human resources to enable underserved students to prepare for, enroll, and succeed in college.
- Assess policy, program, practice, and institutional effectiveness regularly.

Source: Pathways to College Network – A Shared Agenda
What Really Matters to Learning: **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
What the Research Says About High School Student Engagement

The more engaged students are, the less alienated from school they are and the higher their academic achievement.

(Norris, Pignal, & Lipps, 2003)
What the Research Says About High School Student Engagement

Engagement is linked to:

- Persistence
- Integration into school culture and participation in extracurricular activities
- A school climate supportive of achieving educational goals
- Various desirable outcomes
What do we know about high school engagement?

What percent of high school students spend less than 4 hours per week preparing for class?

- 9th – 30%
- 10th – 33%
- 11th – 34%
- 12th – 47%
What do we know about high school engagement?

What percent of high school students go to class without completing readings or assignments? (very often and often combined)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>9th</td>
<td>22%</td>
</tr>
<tr>
<td>10th</td>
<td>23%</td>
</tr>
<tr>
<td>11th</td>
<td>30%</td>
</tr>
<tr>
<td>12th</td>
<td>33%</td>
</tr>
</tbody>
</table>
More HS Engagement Findings

- Seniors disengaged
- Average 1 hour of homework per night
- Passive learning dominates over active and collaborative learning
Quality (and Effort): More Important Than Quantity

Mind, Brain & Education Methods

- Spaced repetition
- Retrieval practice (*tests matter!*)
- Cognitive disfluency
- Interleaving
Concerns

- Students generally expect more from the first year of college than they get. *Why?*

- In one key area -- study time -- student expectations are much lower than we say is important.
Creating Conditions That Matter to Student Success

We can’t leave serendipity to chance
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

- Student-teacher 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.
NSSE & CCSSE Questionnaires

Student Behaviors

Institutional Actions & Requirements

Reactions to College

Student Background Information

Student Learning & Development
In your experience at your institution during the current school year, about how often have you done each of the following?

- Asked questions in class or contributed to class discussions
- Made a class presentation
- Prepared two or more drafts of a paper or assignment before turning it in
About how many hours do you spend in a typical 7-day week doing each of the following?

# of hours per week

- 0
- 1-5
- 6-10
- 11-15
- 16-20
- 21-25
- 26-30
- More than 30

a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)

b. Working for pay on campus

c. Working for pay off campus
About how many hours do you spend in a typical 7-day week doing each of the following?

- **e. Relaxing and socializing** (watching TV, partying, exercising, etc.)
  - [ ] 0
  - [ ] 1-5
  - [ ] 6-10
  - [ ] 11-15
  - [ ] 16-20
  - [ ] 21-25
  - [ ] 26-30
  - [ ] More than 30

- **f. Providing care for dependents living with you** (parents, children, spouse, etc.)
  - [ ] 0
  - [ ] 1-5
  - [ ] 6-10
  - [ ] 11-15
  - [ ] 16-20
  - [ ] 21-25
  - [ ] 26-30
  - [ ] More than 30

- **g. Commuting to class** (driving, walking, etc.)
  - [ ] 0
  - [ ] 1-5
  - [ ] 6-10
  - [ ] 11-15
  - [ ] 16-20
  - [ ] 21-25
  - [ ] 26-30
  - [ ] More than 30
Effective Educational Practices

- Level of Academic Challenge
- Active & Collaborative Learning
- Enriching Educational Experiences
- Student-Faculty Interaction
- Supportive Campus Environment
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
Impact of Educationally Purposeful Activities on First Academic Year GPA by Race/Ethnicity

- Blue line: Hispanic
- Red line: White

First-year GPA vs. Educationally Purposeful Activities (standardized)
Impact of Educationally Purposeful Activities on the Probability of Returning for the Second Year of College by Race

![Graph showing the impact of educationally purposeful activities on the probability of returning for the second year of college by race. The graph includes two lines, one for African American students and one for White/Caucasian students. The x-axis represents educationally purposeful activities (standardized), while the y-axis represents the probability of returning. The graph shows a positive correlation between educationally purposeful activities and the probability of returning, with African American students tending to have a higher probability of returning compared to White/Caucasian students.](image-url)
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 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
## 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>
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<tr>
<td>Learning Communities</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
</tr>
<tr>
<td>Service Learning</td>
<td>++</td>
<td>+++</td>
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<td>++</td>
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<tr>
<td><strong>Senior</strong></td>
<td></td>
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<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 Practices and Senior NSSE Respondents Graduating on Time

### Percentage Graduating "On Time" (i.e., in 2006-07)

<table>
<thead>
<tr>
<th>Category</th>
<th>None</th>
<th>1 HIP</th>
<th>2 HIPs</th>
<th>3 or more HIPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina/o Respondents</td>
<td>38%</td>
<td>48%</td>
<td>65%</td>
<td>73%</td>
</tr>
<tr>
<td>Other Respondents</td>
<td>38% (V = .255 (.007)]</td>
<td>63% (V = .109 (.094)]</td>
<td>68%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Source: *Does Participation in Multiple High Impact Practices Affect Student Success at Cal State Northridge?* by Bettina Huber (unpublished paper, 2010).
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%)*
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
Engaging Pedagogies and Practices

1. Classroom organization
2. Early and continuing assignments requiring reflection and integration coupled with feedback
3. Use of peer preceptors/mentors
4. One minute papers (variations)
5. Case studies
6. Debates
7. Simulations
8. Small group problem sets
9. Others...
The Major Tasks

Teach students to:

- **Reflect** – on their experiences inside and outside the classroom
- **Integrate** – see the connections between different classes, 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*
Now What?

- What practices are you currently using that are promising?
- What additional effective practices would you like to implement?
- What obstacles must be overcome to use effective educational practices more often in your classes?
- What else do you need to know and be able to do to better prepare your students for postsecondary success?
Questions
&
Discussion