National Institute for
Learning Outcomes Assessment
Making Learning Outcomes Usable & Transparent

What Matters to Student Success: The Promise of High-Impact Practices
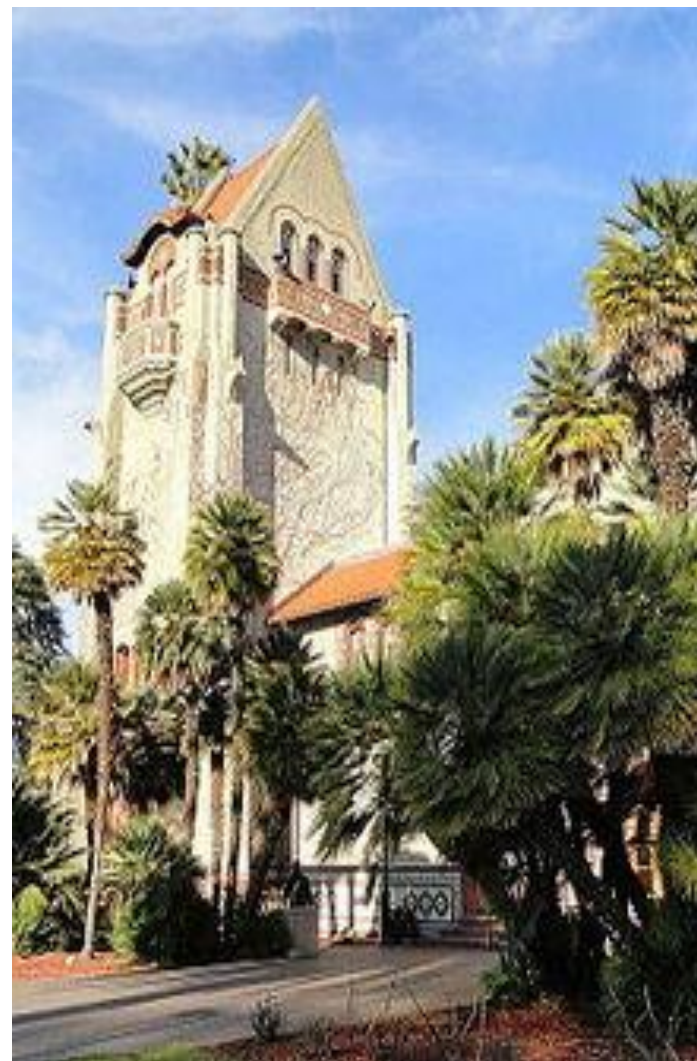
George D. Kuh

Student Success Symposium

San Jose State University

March 15, 2018

INDIANA UNIVERSITY
Center for Postsecondary Research

"That's nice. What else have we learned at school?"

Student Success

Insuring that the U.S. and its citizens thrive in the global future requires a postsecondary education that results in high levels of learning and personal development for *ALL* students.

Overview

➢ **What the world and SJSU students need now**

➢ **Why and how high-impact practices matter to student success**

➢ **Five priorities**

Ponder This

- What are examples of high-impact activities at SJSU?

- How do you know they are "high impact?"

- How many and which students participate?

- What would it take for every first year student to do a *high quality* high-impact activity? And for students to do at least one more later connected to their major?

Today's U.S. Workforce

True or false?

SJSU graduates will have 10-14 jobs in their career

False   *They* **will have 10-14 jobs** *by age 38***!**

DOL-BLS

Today's U.S. Workforce

What percent of the entire labor force changes jobs *ANNUALLY*?

(a) 9% (b) 15% (c) 21%

(d) 27% (e) 33%

e. *33+%*

DOL-BLS

Today's U.S. Workforce

What percent of workers have been with their company fewer than 5 years?
(a) 18% (b) 29% (c) 38%
(d) 50% (e) 61%

d. *50%*

Economy Defined by Greater Workplace Challenges and Dynamism

➢ **SJSU graduates will have 10-14 jobs *by age 38*!**

➢ **More than 1/3 of the entire US labor force changes jobs *ANNUALLY*.**

➢ **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

What the World Needs Now

1. **Graduates ready to hit the ground running, with the knowledge, proficiencies, and dispositions to be economically self sufficient, and socially, personally and civically responsible**

2. **An educated citizenry prepared for a lifetime of continuous learning, reflection, and self-mediated intellectual, vocational, and personal development**

# The Major Tasks

Teach students to:

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

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

➢ *Integrate* **– connect and grasp the relevance of what they are learning from different courses, out-of-class experiences, and life beyond the institution**
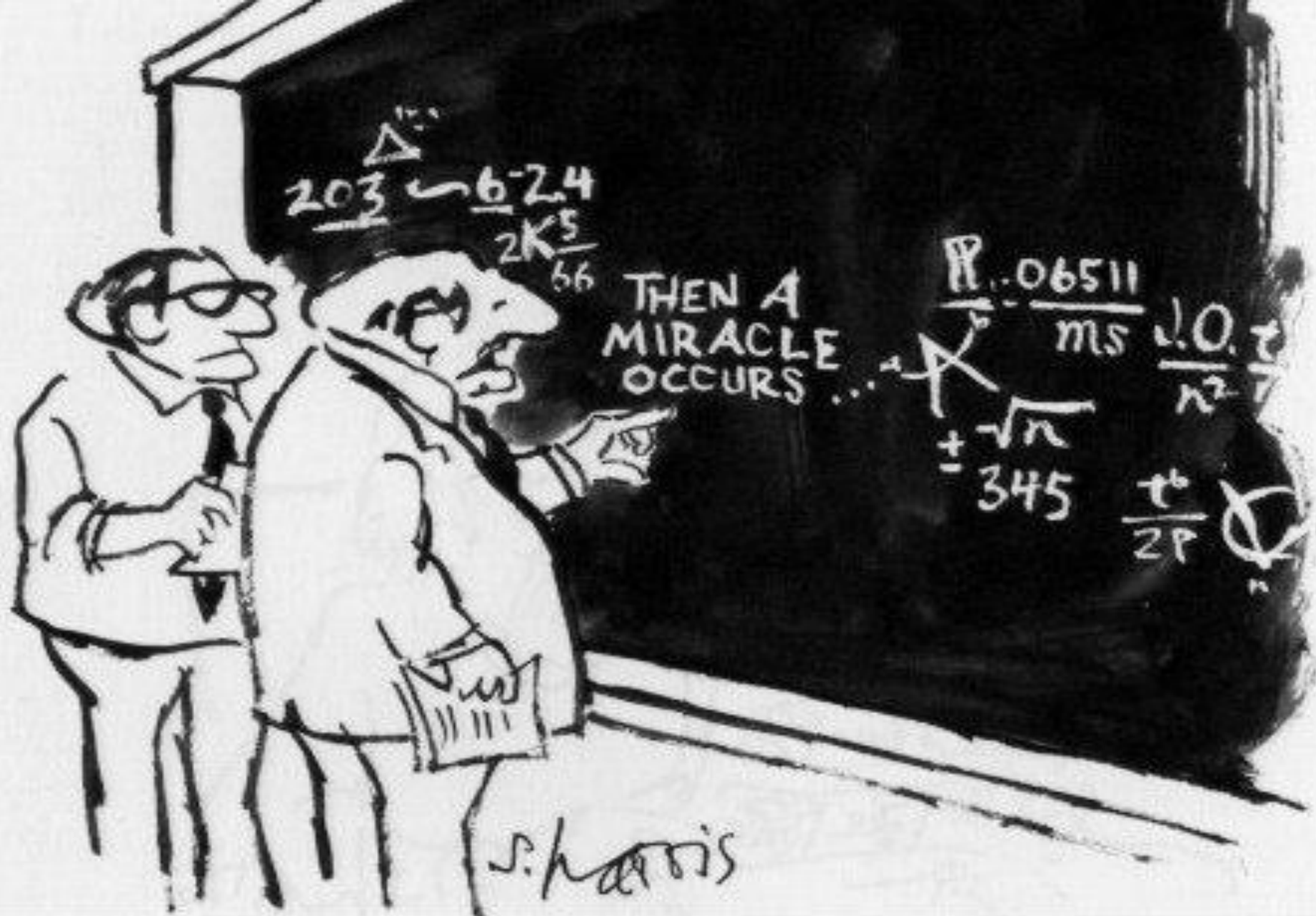
"I think you should be more explicit here in step two."

What *Really* Matters in College?
Student Engagement
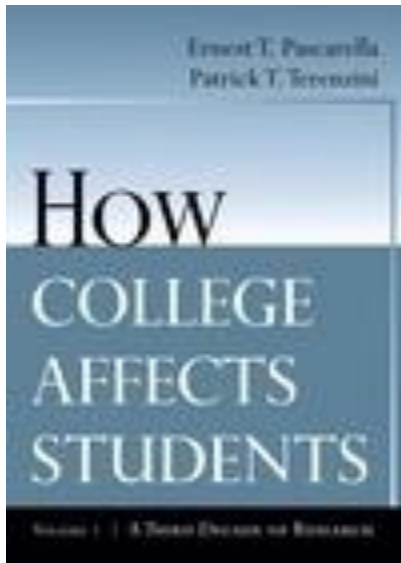
Because individual effort and involvement are the critical determinants of college impact, institutions should focus on the ways they can shape their academic, interpersonal, and extracurricular offerings to encourage student engagement.
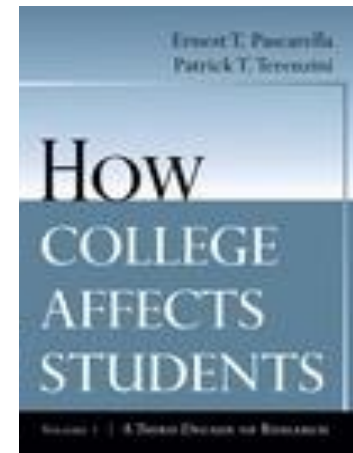
Pascarella & Terenzini, 2005, p. 602

It Takes a Whole Institution to Educate a Student

Something Else That *Really Matters* in University

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**

SPARTAN
CONNECT

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

Grades, persistence, student satisfaction, gains across a range of desired outcomes, and engagement go hand in hand

It's more complicated than this…

➢ *Many educational effects are "conditional"*

➢ *Some are compensatory*

➢ *Some have unusually positive effects* – high-impact practices

High-Impact Activities

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

- ★ **First-Year Seminars and Experiences**
- ★ **Common Intellectual Experiences**
- ★ **Learning Communities**
- ★ **Writing-Intensive Courses**
- ★ **Collaborative Assignments and Projects**
- ★ **Inquiry & Creative Activity**
- ★ **Diversity/Global Learning**
- ★ **Service/Community-Based Learning**
- ★ **Internships and Field Placements**
- ★ **Capstone Courses and Projects**
- ★ **ePortfolio**

The HIPs Juggernaut
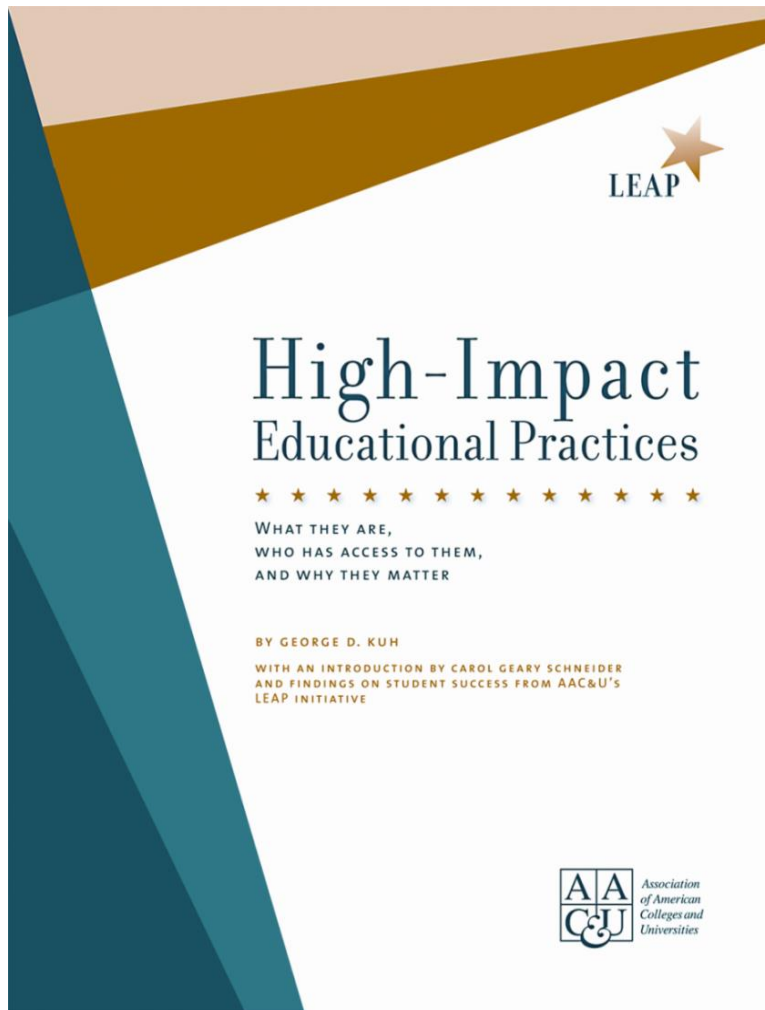
AAC&U HIPs Resources

AAC&U HIPs Resources

Why HIPs Are Important

➢ **They are associated with positive effects on a variety of desired outcomes**

➢ **They have *compensatory effects* for students from historically underserved populations**

➢ **They shrink the psychological size of the institution**

➢ **Multiple HIPs have cumulative, additive effects**

➢ **They require applied, hands-on, 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**

Essential Learning Outcome:

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

	Deep Learning	Gains General	Gains Personal	Gains Practical
First-Year				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	++
Later				
Study Abroad	++	+	++	
Student-Faculty Research	+++	++	++	++
Internship	++	++	++	++
Service Learning	+++	++	+++	++
Culminating Experience	++	++	++	++

+ p < .001, ++ p < .001 & Unstd B > .10, +++ p < .001 & Unstd B > .30

Effects of Participating in High-Impact Activities on Student Engagement

|	Level of Academic Challenge	Active and Collab. Learning	Student-Staff Interaction	Supportive Campus Env.
First-Year				
Learning Communities	++	+++	+++	++
Service Learning	++	+++	+++	++
Later				
Study Abroad	++	++	++	+
Student-Faculty Research	+++	+++	+++	++
Internship	++	+++	+++	++
Service Learning	++	+++	+++	++
Culminating Experience	++	++	+++	++

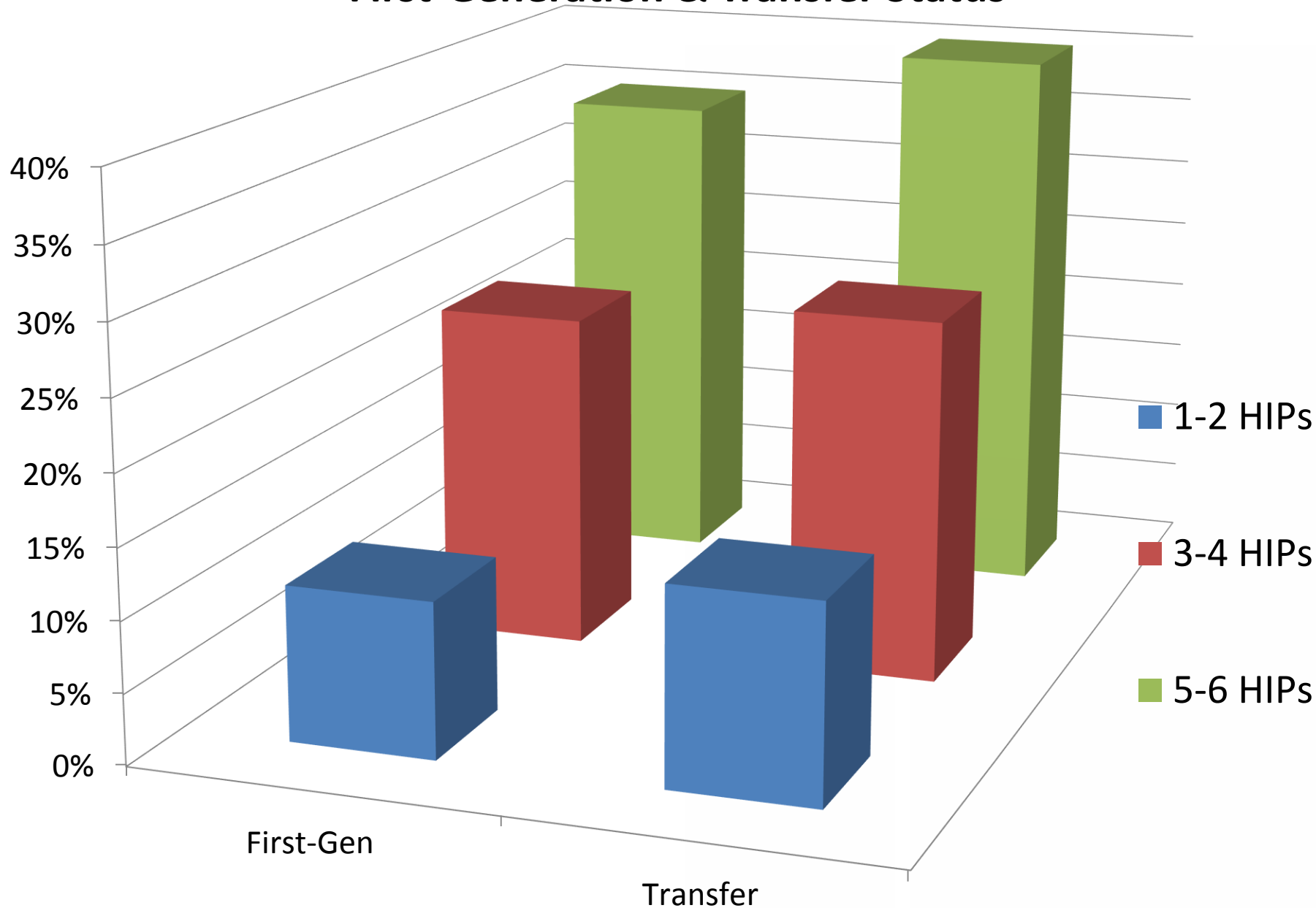+ $p < .001$, ++ $p < .001$ & Unstd B > .10, +++ $p < .001$ & Unstd B > .30

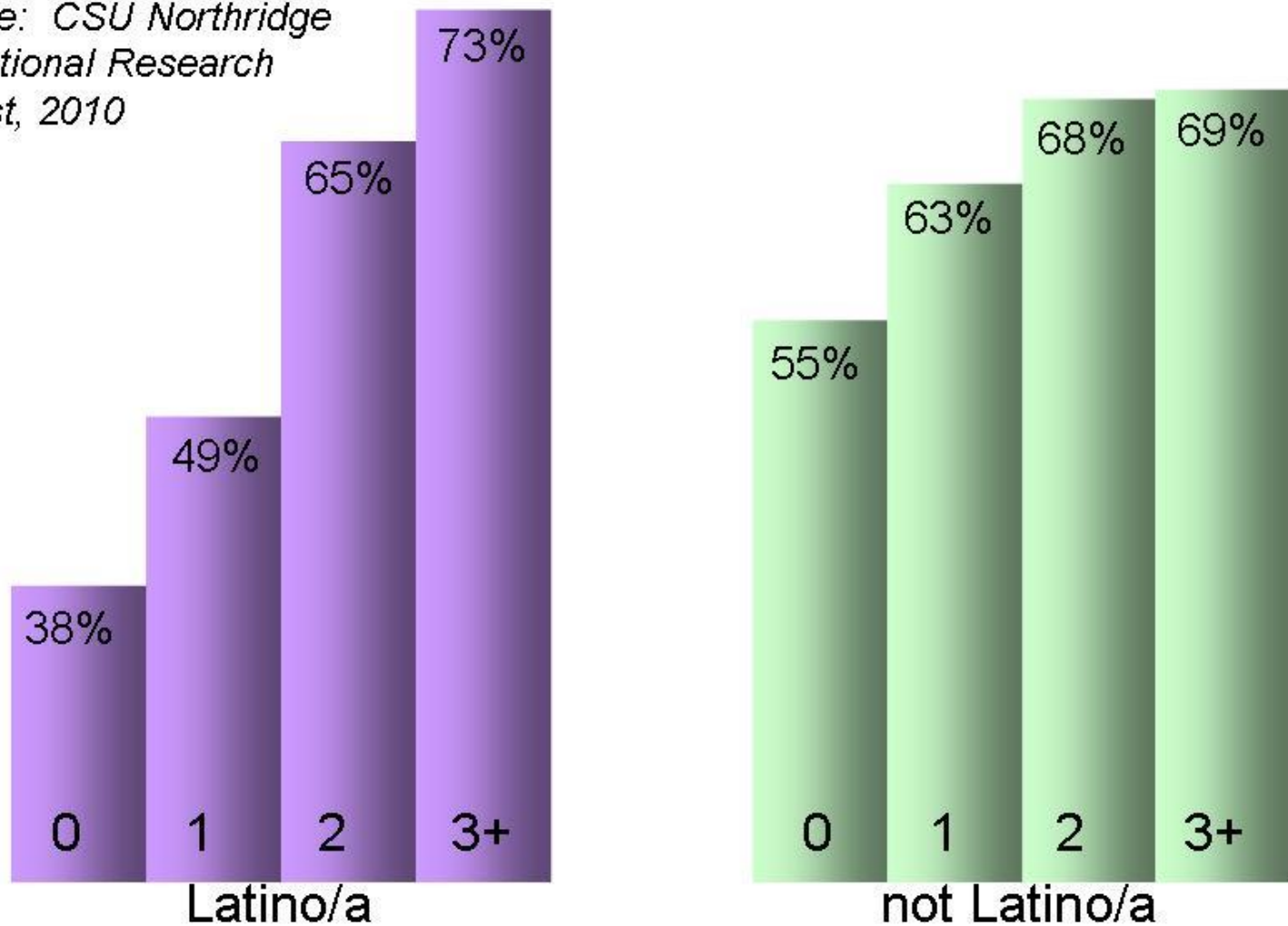Avg % Gains for Participation in Multiple HIPs vs. No Participation (by Race)
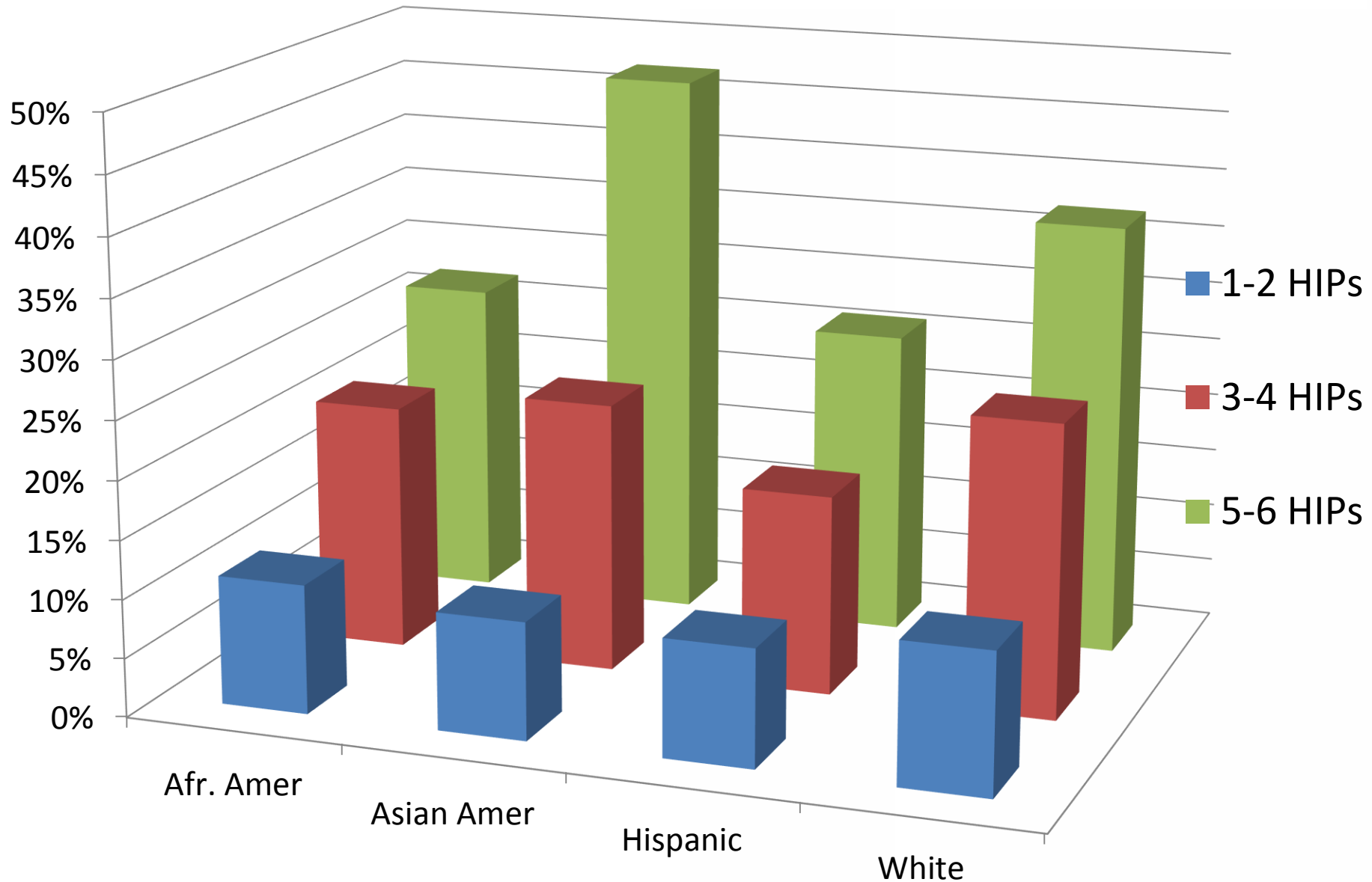
Avg % Gains by Participation in Multiple HIPs vs. No Participation by First-Generation & Transfer Status

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 applied learning activities

% 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%)*

WAIT -- There's More

❖ **HIPs are particularly promising for cultivating dispositional attributes such as intrapersonal and interpersonal competencies, which are considered essential for a success during and after college.**

Dispositional Attributes

❖ **Interpersonal competencies -- expressing information to others, interpreting others' messages and responding appropriately.**

❖ **Intrapersonal competencies -- self-management, conscientiousness, flexibility, resilience**

❖ **Neuro-cognitive competencies – crystallized and fluid intelligence**
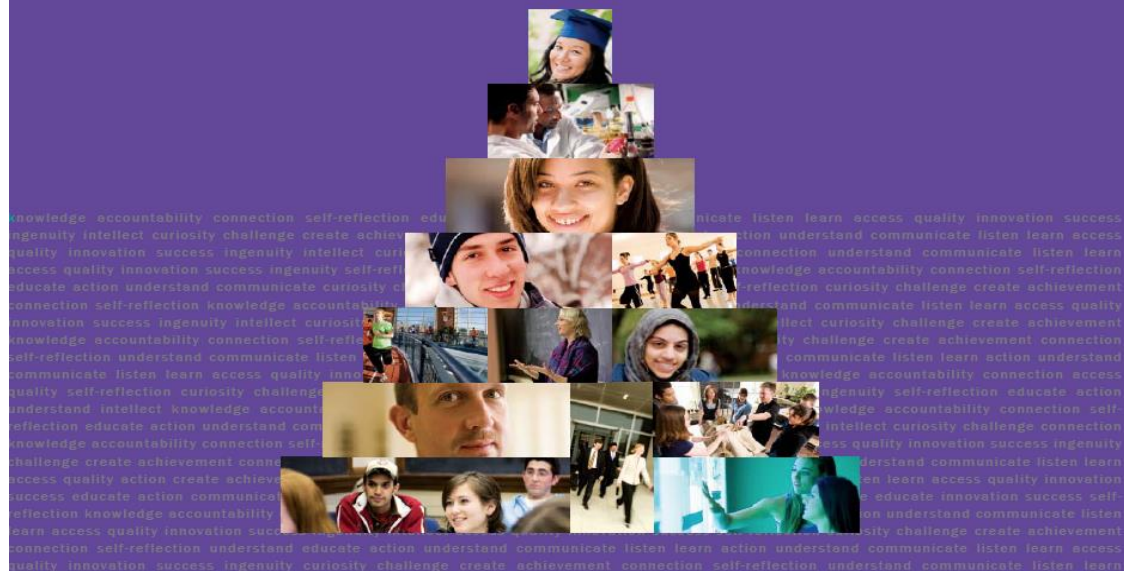
"Soft Skills" Rule at Google!

- ❖ **Generosity**

- ❖ **Curiosity**

- ❖ **Empathy**

- ❖ **Emotional intelligence**

- ❖ **Effective communication and listening skills**

- ❖ **Egalitarian sensibilities**

- ❖ **Collaborative problem solving**

National Institute for Learning Outcomes Assessment

Using ePortfolio to Document and Deepen
the Impact of HIPs on Learning Dispositions

George D. Kuh, Laura M. Gambino, Marilee Bresciani Ludvik, and Ken O'Donnell

High-Impact Activities Increase Odds Students Will…

- ✓ *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*
- ✓ *Discover relevance of learning through real-world applications*
- ✓ *Demonstrate competence publicly*

AMERICAN AVIATION

LEARN TO FLY HERE!

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- ✓ *Experience diversity*
- ✓ *Get more frequent feedback*
- ✓ *Discover relevance of learning through real-world applications*
- ✓ *Demonstrate competence publicly*
- ✓ *Reflect and integrate learning*

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*

Undergraduate Studies

High-Impact Practices and the Disparities Within…

Seniors in All HIPs

- ✓ *Fewer 1ˢᵗ gen students*
- ✓ *Fewer students of color*
- ✓ *Fewer part-time students*
- ✓ *Fewer older students*

Keep in Mind…

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

✓ Implementation quality matters!

✓ Implications for advising

✓ **Not every faculty or staff member has to be directly involved in a HIP**

✓ *The characteristics of high-impact applied learning activities can be infused into any classroom, lab, studio or other learning setting!*

Five Priorities

1. **Measure and act on what matters to student success**
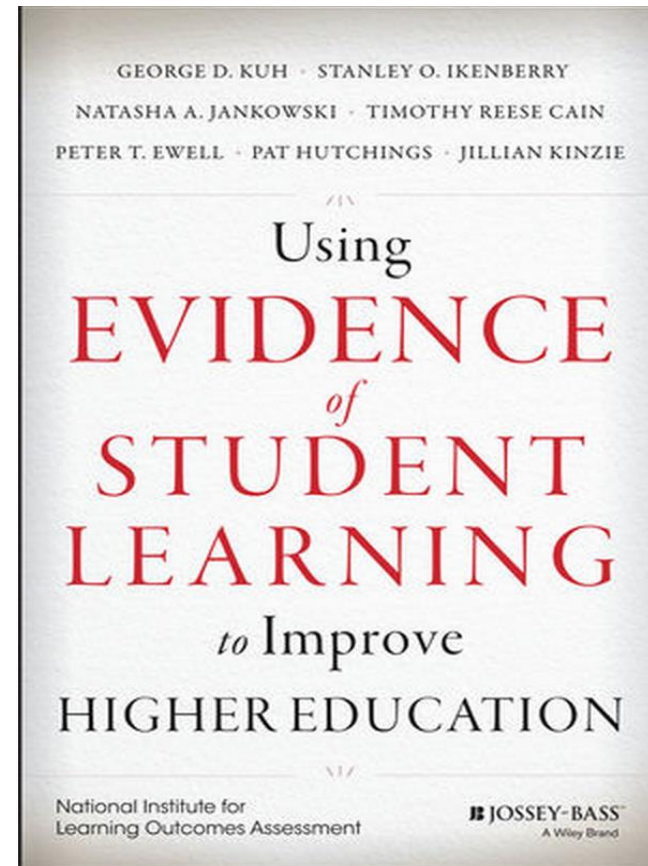
Five Priorities

2. Insist on doing what works – engaging pedagogies and assessments

- **a.** Classroom organization
- **b.** Use of peer coaches/mentors
- **c.** One minute papers (variations)
- **d.** Case studies
- **e.** Debates
- **f.** Simulations
- **g.** Small group problem sets
- **h.** ePortfolios
- **i.** Others???

Make Effective Practice Mandatory

- ➢ **Employ intrusive advising**
- ➢ **Require orientation (also for transfers)**
- ➢ **Stop late registration**
- ➢ **Math refresher before placement test**
- ➢ **Reduce D/W/F rates**
- ➢ **Deploy *effective* early warning systems**
- ➢ **Scale up Supplemental Instruction**
- ➢ **Communicate with students' family members**
- ➢ **Early and continuing assignments requiring reflection and integration coupled with feedback**
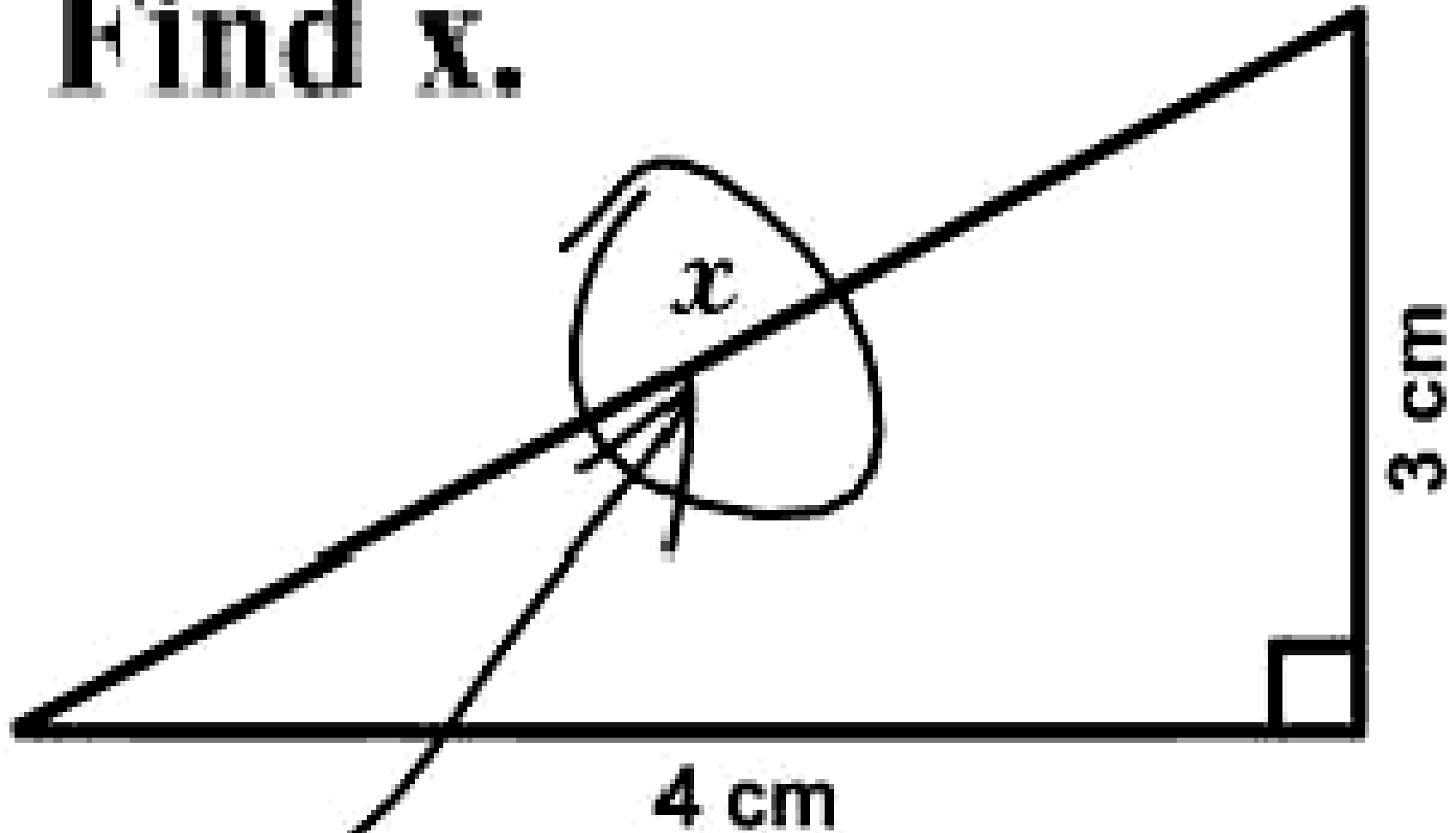
VERY IMPORTANT

Design assignments to elicit the student behaviors that demonstrate the desired outcomes.

3. Find x.

3. Find x.

3 cm

4 cm
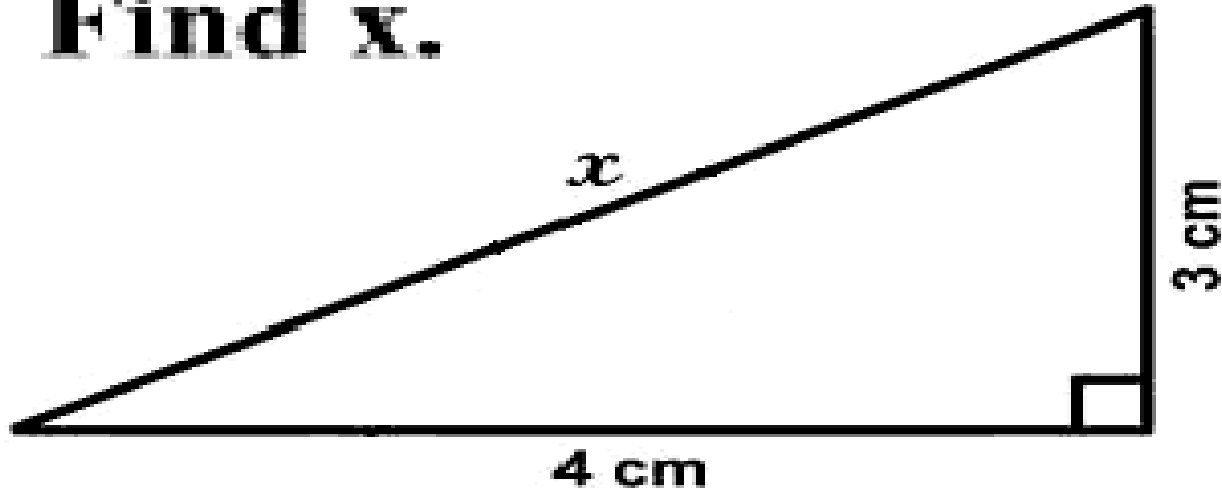
x

Here it is

National Institute for Learning Outcomes Assessment

November 2014

Catalyzing Assignment Design Activity on Your Campus: Lessons from NILOA's Assignment Library Initiative

Pat Hutchings, Natasha A. Jankowski, & Peter T. Ewell

Assignment Library and Tool Kits

- ❖ **75+ assignments aligned with DQP proficiencies**
- ❖ **Revised and improved with feedback**
- ❖ **Contributed by faculty from a wide range of fields and institutional types**
- ❖ **Online, indexed, and searchable**
- ❖ **With a scholarly citation**
- ❖ *Stimulating and supporting assignment work on campuses*

www.assignmentlibrary.org
www.learningoutcomesassessment.org/assignmenttoolkit.html

Five Priorities

3. **Sunset redundant and ineffective programs**

4. **Have *every student* do (at least) one high-quality "high-impact" experience in the first year and at least one more linked to the specific credential (major, certificate, certification)**

5. Make campus employment something akin to a HIP

U of Iowa Student Employment Project "Guided Reflection on Work" (GROW)

- **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?")**

IOWA GROW® participants were more likely (p<.01) to agree/strongly agree that their job was helping them attain the following outcomes of student employment:

1 My supervisor helps me make connections between my work and my life as a student.

2 My job has helped prepare me for the world of full-time employment.

3 My job has helped me improve my written communication skills.

4 I can see connections between my job and major/coursework.

5 My job has helped me learn about career options.

6 My job has helped me develop more effective time management skills.

7 My job has helped me improve my oral communication skills.

8 My job has helped me develop conflict resolution skills.

9 My job has helped me use critical thinking skills to form opinions and solve problems.

10 Because of my job, I am able to work effectively with individuals with a variety of backgrounds, experiences, and cultures.

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Beware of the Implementation Dip

Ponder This

➢ **What are examples of high-impact activities at SJSU?**

➢ **How do you know they are "high impact?"**

➢ **How many and which students participate?**

➢ **What would it take for every first year student to do a** *high quality* **high-impact activity? And for all students to do at least one more later connected to their major?**

The things we have to learn before we do them, we learn by doing them.

Aristotle, *Nicomachean Ethics*

Questions
&
Discussion