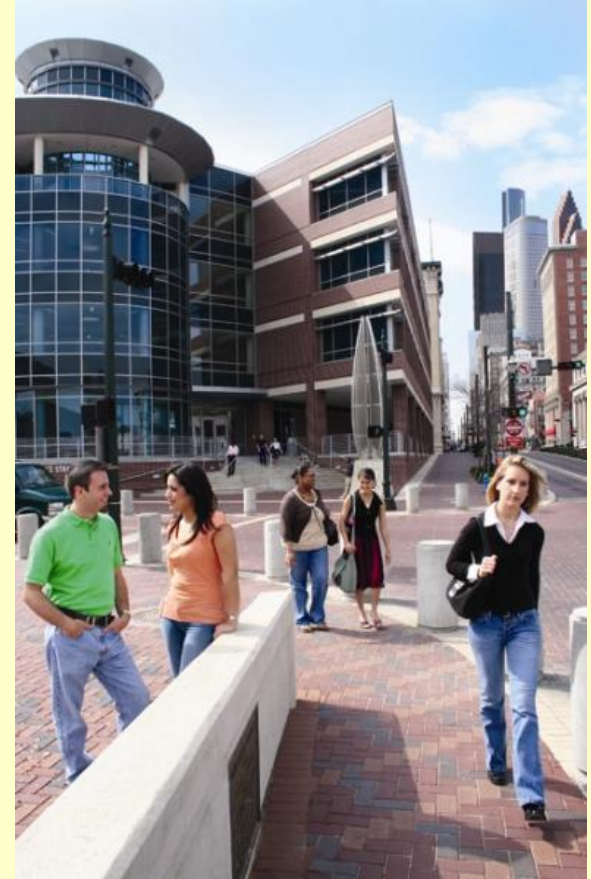


Student Success in College: The Promise of High- Impact Practices

George D. Kuh

**Student Success Summit
University of Houston
September 12, 2011**



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**

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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



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



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



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



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...**”

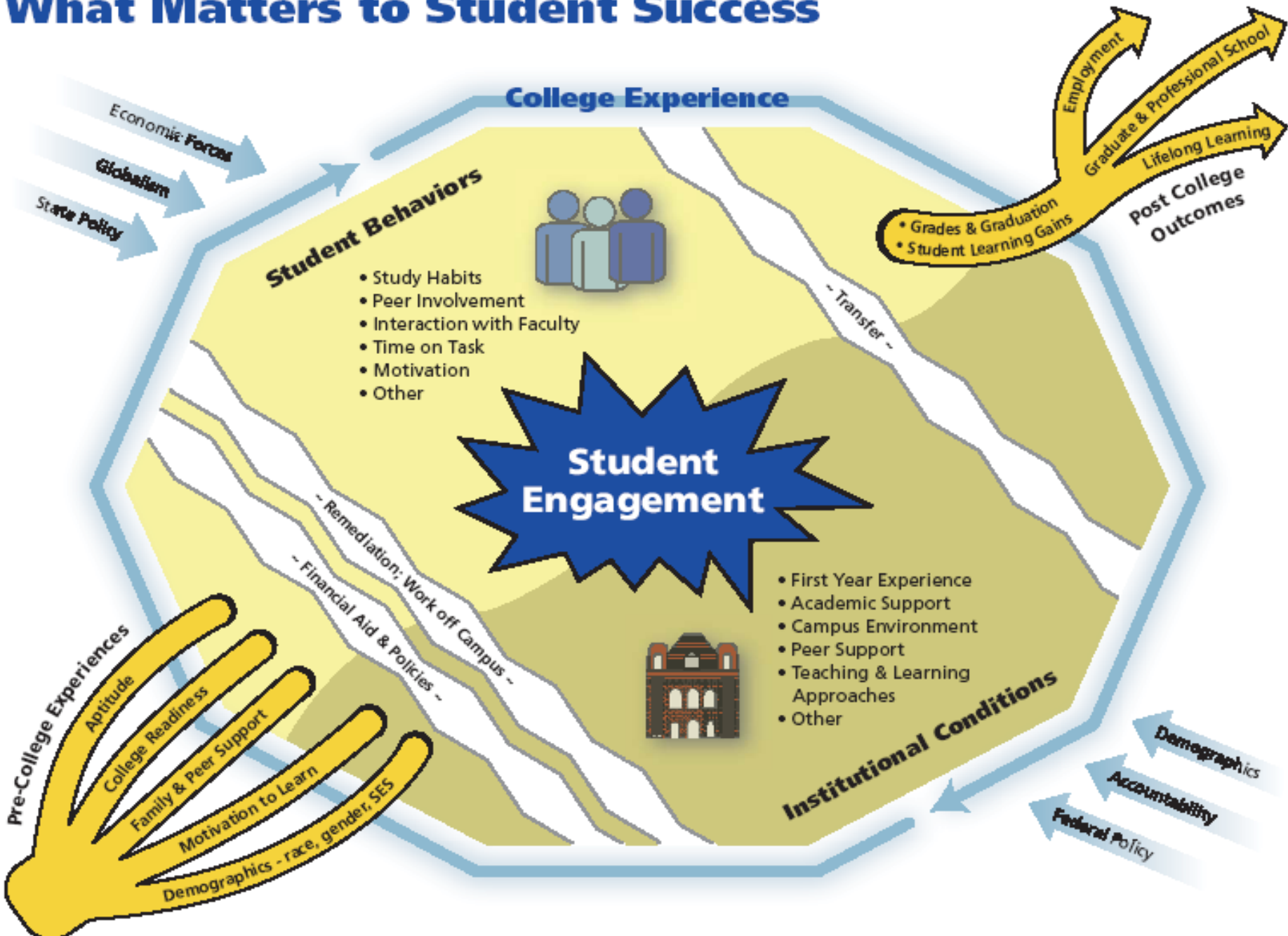
*Anthony Carnevale, Georgetown University
Center on Education and the Workforce*

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



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

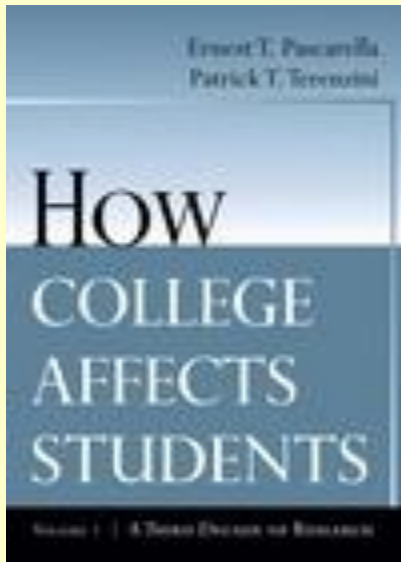
d. *teachers*

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**.

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)

9th – 22%

10th – 23%

11th – 30%

12th – 33%

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

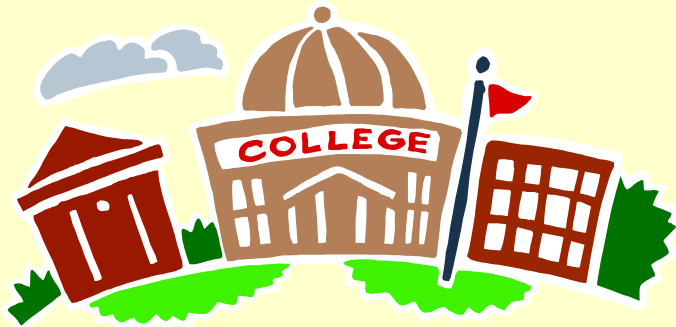
- **Spaced repetition**
- **Retrieval practice (*tests matter!*)**
- **Cognitive disfluency**
- **Interleaving**

Concerns

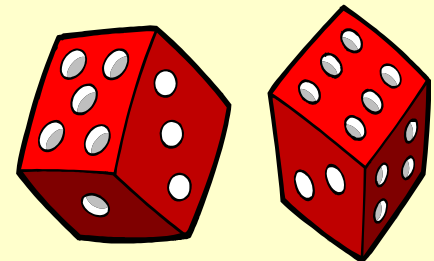
- Students generally expect more from the first year of college than they get. *Why?*
- In one key area -- study time -- student expectations are much lower than we say is important.



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**



***National Survey of
Student Engagement***
(pronounced “nessie”)

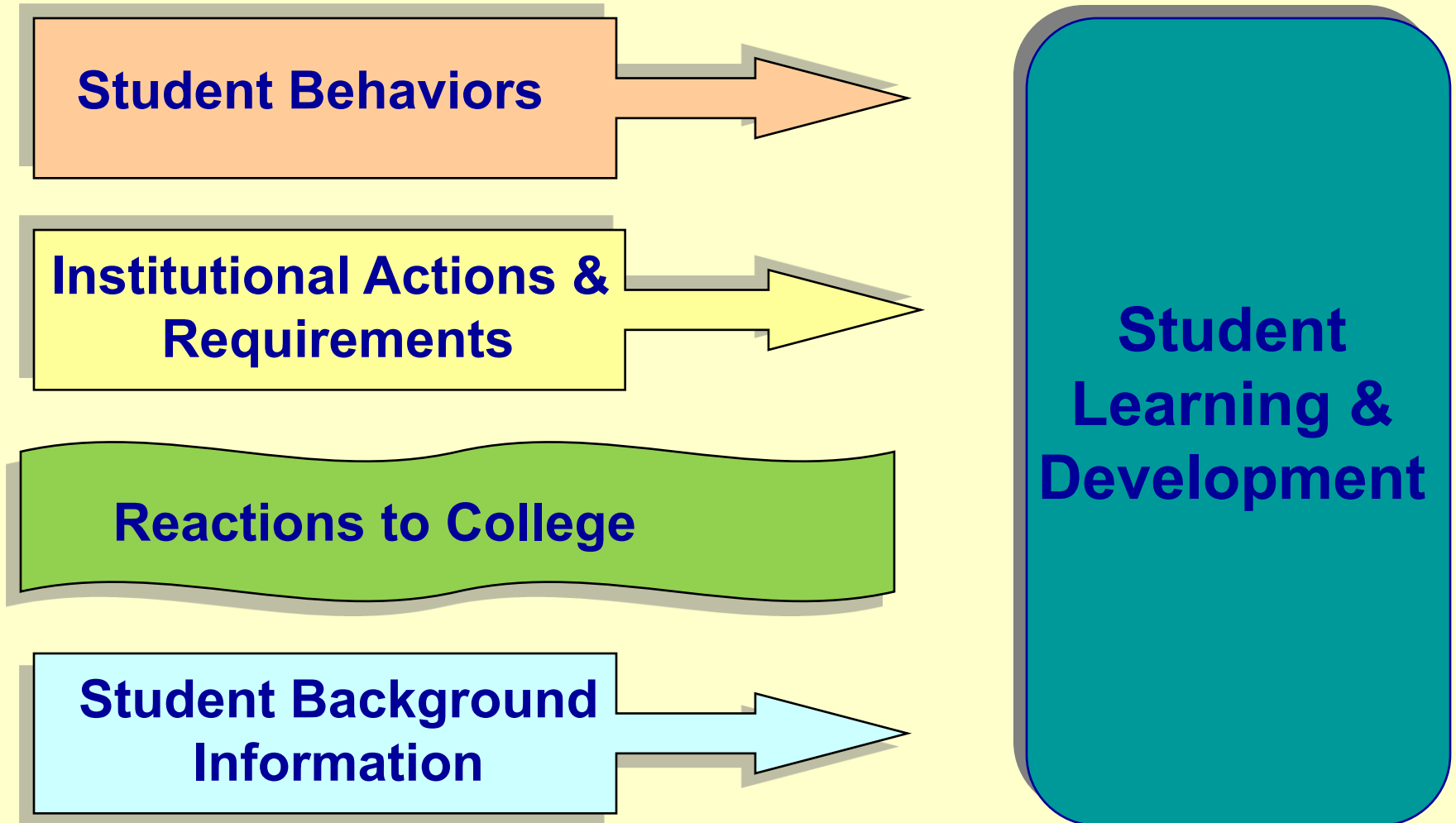


***Community College
Survey of Student
Engagement***
(pronounced “cessie”)



College student surveys that assess the extent to which students engage in educational practices associated with high levels of learning and development

NSSE & CCSSE Questionnaires



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

	Very often ▼	Often ▼	Some- times ▼	Never ▼
a. Asked questions in class or contributed to class discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Made a class presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Prepared two or more drafts of a paper or assignment before turning it in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

26-30

21-25

16-20

11-15

6-10

1-5

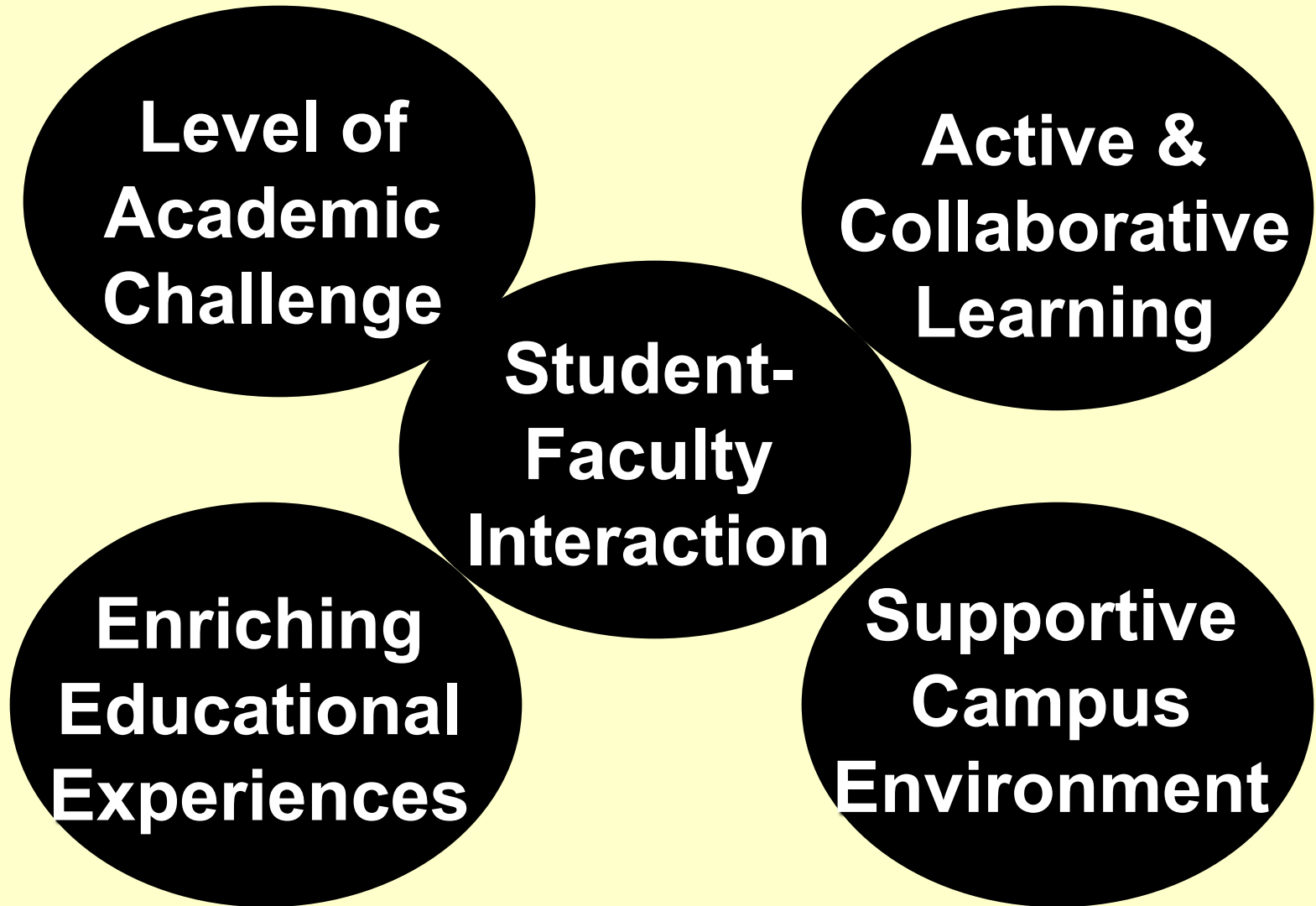
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- a. Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)

b. Working for pay **on campus**

c. Working for pay **off campus**

Effective Educational Practices



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



It's more complicated than this...

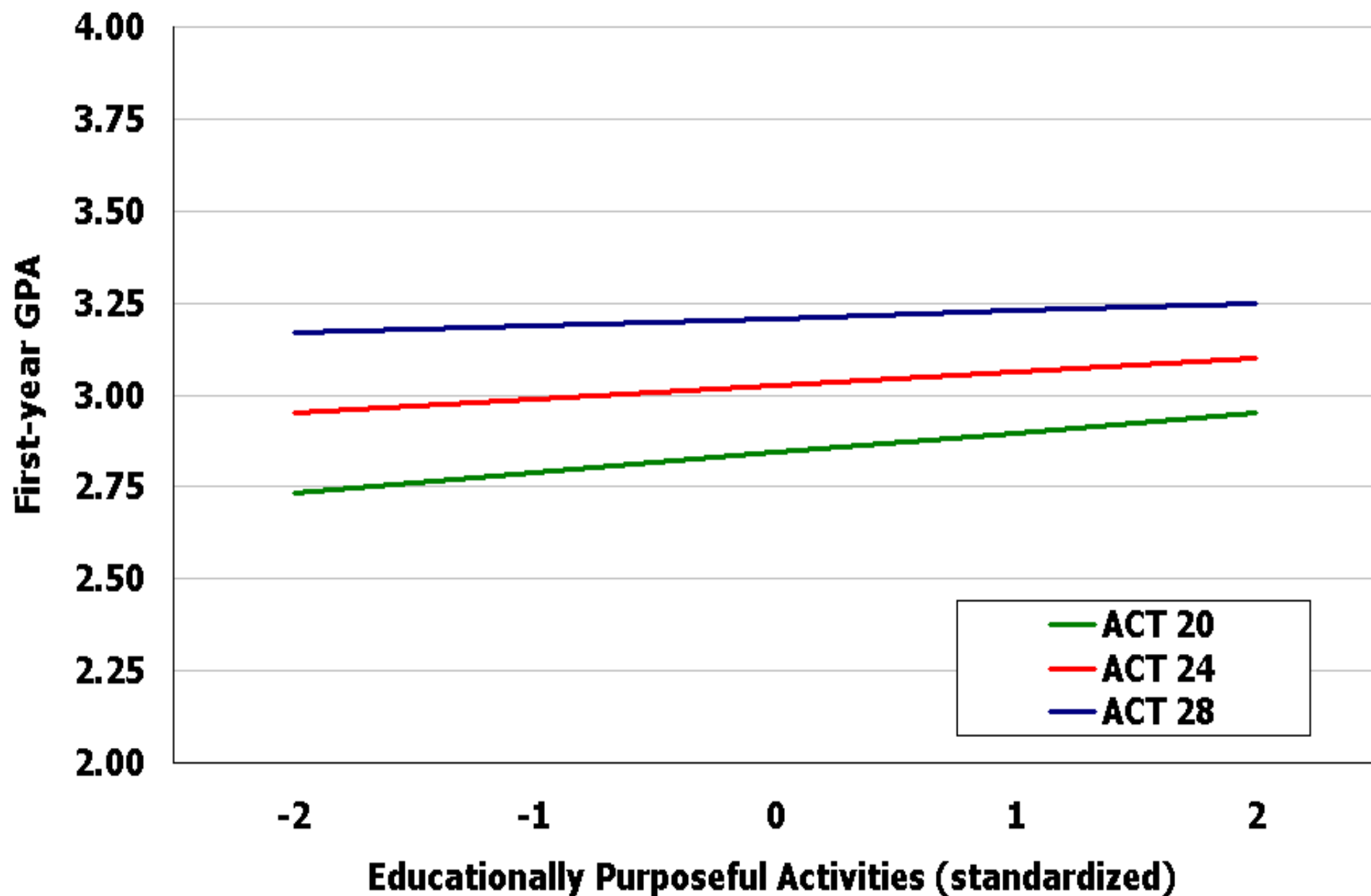
- *Many of the effects of college are “conditional”*
- *Some are compensatory*
- *Some have unusually positive effects*



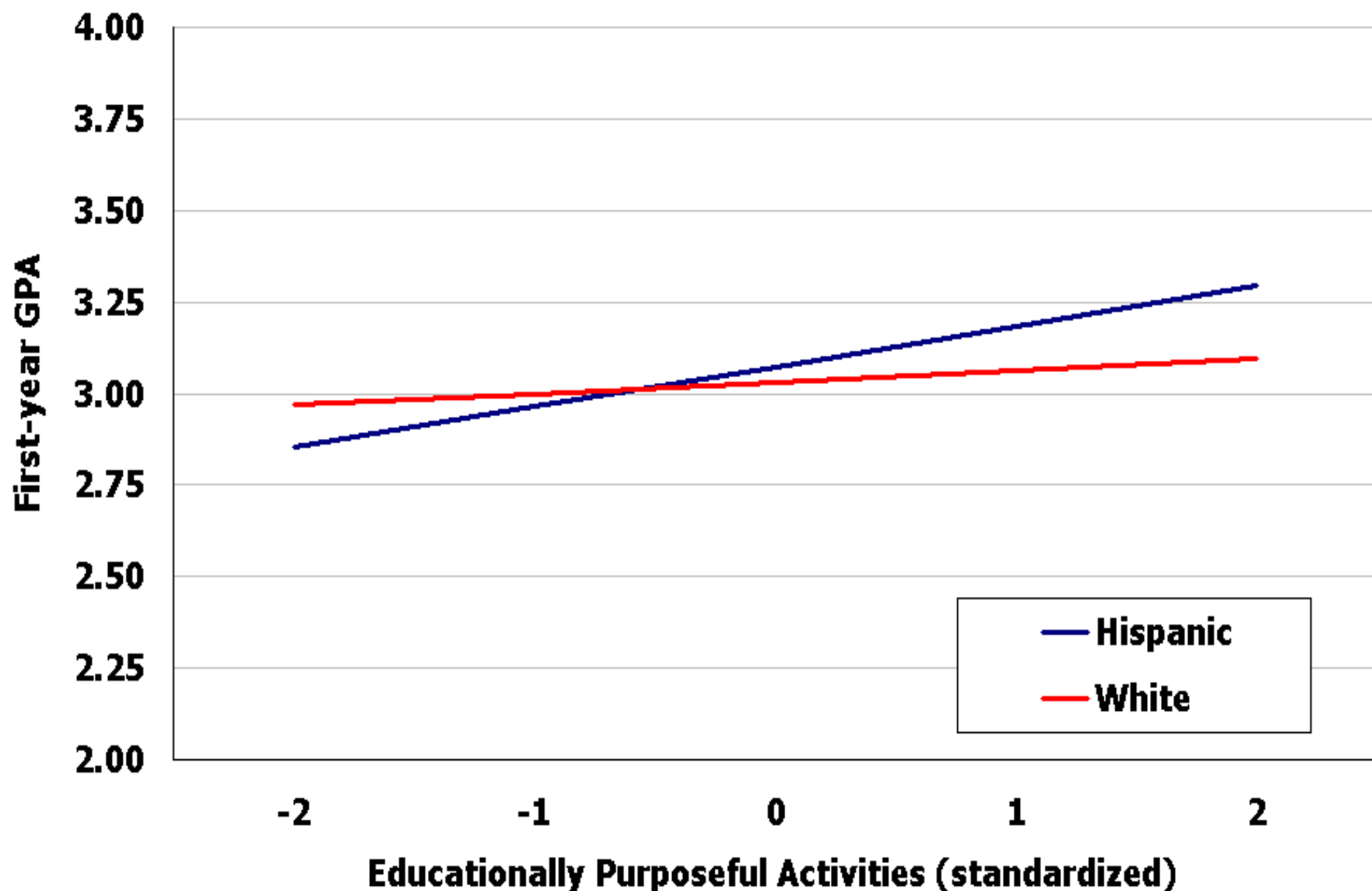
Who's (on average) more engaged?

- **Women**
- **Full-time students**
- **Students who live on campus**
- **Students with diversity experiences**
- **Students who start and stay at same school**

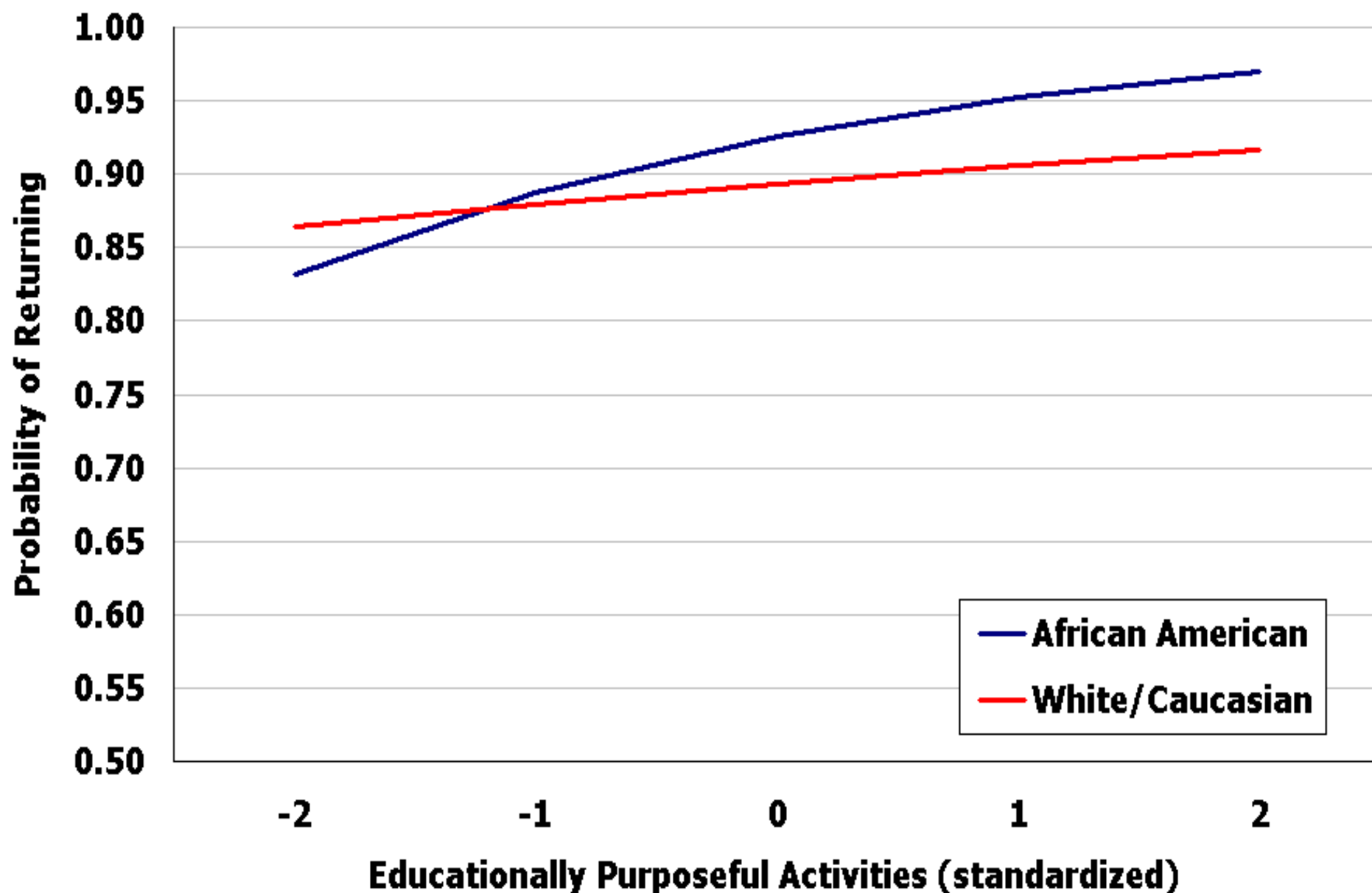
Impact of Educationally Purposeful Activities on First Academic Year GPA by Pre-College Achievement Level



Impact of Educationally Purposeful Activities on First Academic Year GPA by Race/Ethnicity



Impact of Educationally Purposeful Activities on the Probability of Returning for the Second Year of College by Race



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



LEAP



LEAP

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**

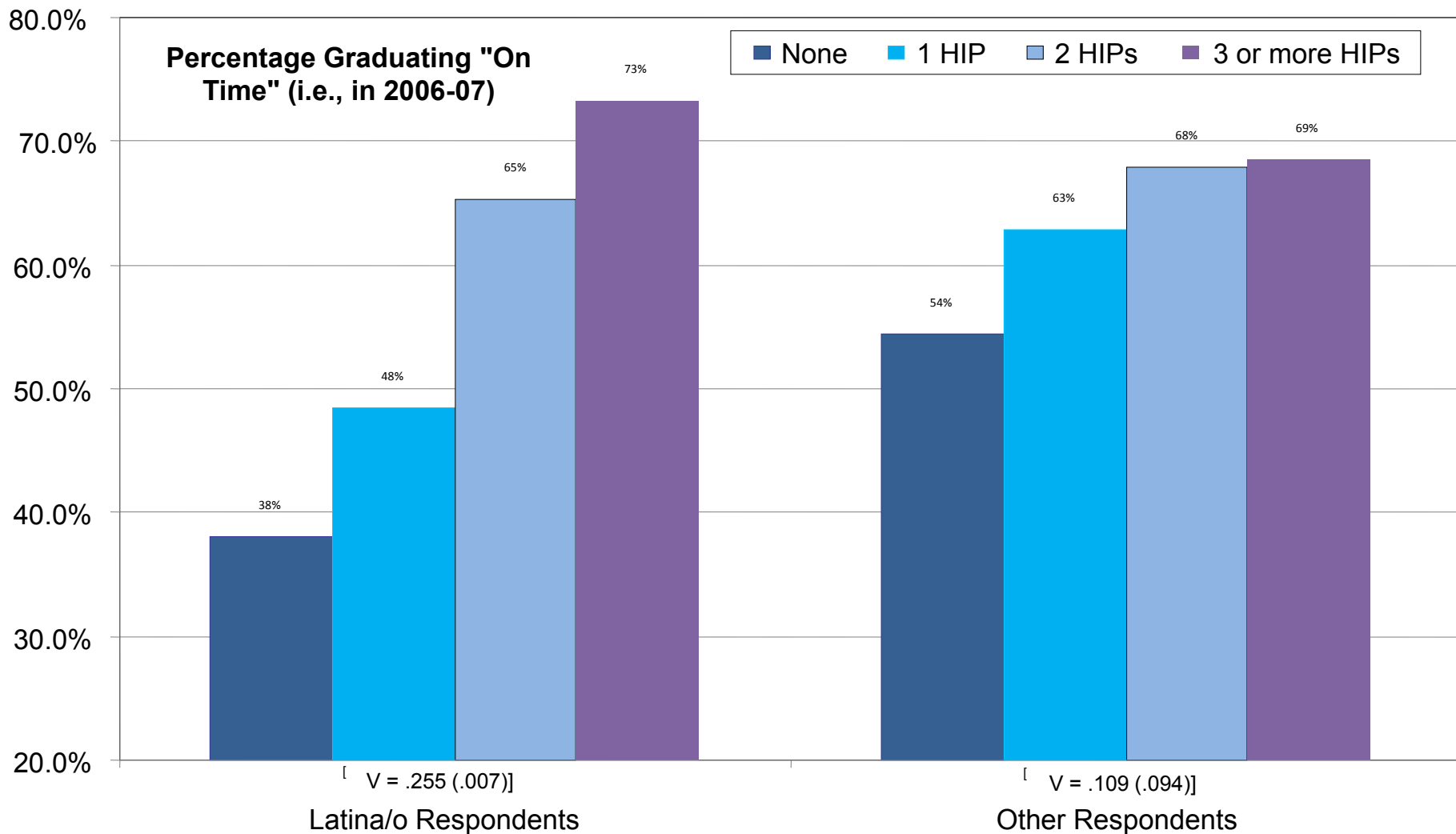


Effects of Participating in High-Impact Activities on Student Engagement

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

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

High-Impact Practices and Senior NSSE Respondents Graduating on Time



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

