

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

# What Matters to Student Success: Lessons for USF

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**Student Success Symposium**

**University of South Florida  
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INDIANA UNIVERSITY  
Center for Postsecondary Research

# Student Success

**We all want the same thing—an undergraduate experience that results in high levels of learning and personal development for all students.**

***“...at the heart of the university is a fundamental commitment to student success.”***

USF 2013-2018 Strategic Plan, p. 3



# **USF Definition of Student Success**

- **Higher persistence and graduation rates**
- **Lower student debt**
- **Higher satisfaction with the university**
- **Higher progression to careers or post-graduate programs**
- **Acquisition of skills, knowledge and dispositions to succeed**

# USF Definition of Student Success

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- Higher progression to careers or post-graduate programs
- ***Acquisition of skills, knowledge and dispositions to succeed***

## **Ponder This**

- **What do students need to know and do to succeed at USF?**
- **What programs and practices are you currently using that are promising?**
- **What more do you need to know and do to be more effective in your work with students?**
- **What obstacles need to be addressed and what resources are needed to help more USF students finish what they start?**

# The Major Tasks

Teach students to:

- **Reflect** – think about their thinking and experiences in and out of the classroom, on and off the campus
- **Integrate** – connect and grasp the relevance of what they are learning from different courses, out-of-class experiences, and life beyond the institution
- **Apply** – transfer and use what one has learned in different settings that present novel challenges and opportunities

# Overview



- **What the world needs now**
- **Why engagement and deep learning matter**
- **Promising practices**
- **Five priorities**
- **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

- ...more college-educated workers.
- ...more educated workers with *higher levels of learning and knowledge.*



# What employers want from colleges and graduates

■ Strongly agree with this statement about employees/future hires    ■ Somewhat agree

**Our company puts a priority on hiring people with the intellectual and interpersonal skills that will help them contribute to innovation in the workplace**



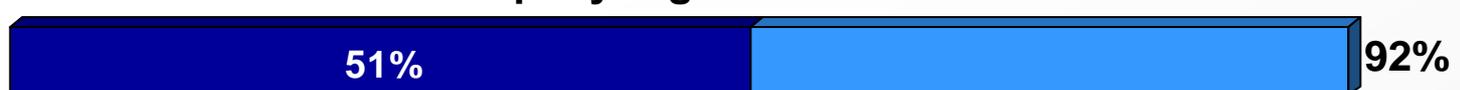
**Candidates' demonstrated capacity to think critically, communicate clearly, & solve complex problems is more important than their undergraduate major**



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



**Innovation is essential to our company/organization's continued success**



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



# 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***

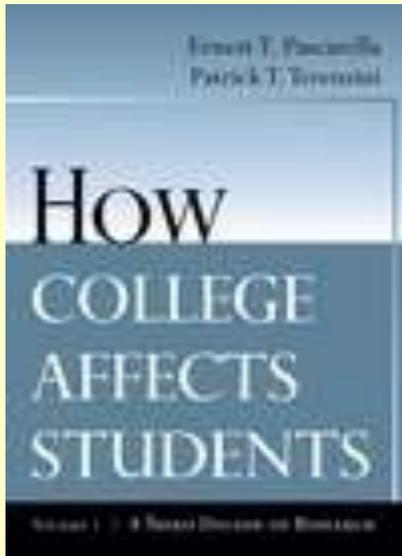
- **Attend to the underlying meaning of information as well as content**
- **Integrate and synthesize different ideas, sources of information**
- **Discern patterns in evidence or phenomena**
- **Apply knowledge in different situations**
- **View issues from multiple perspectives**

# 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**.***

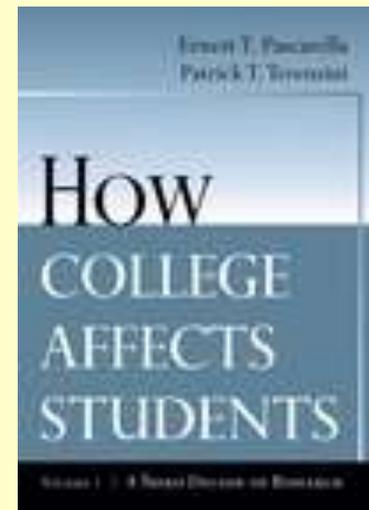
# ***It Takes a Whole Campus to Educate a Student***



# 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**



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

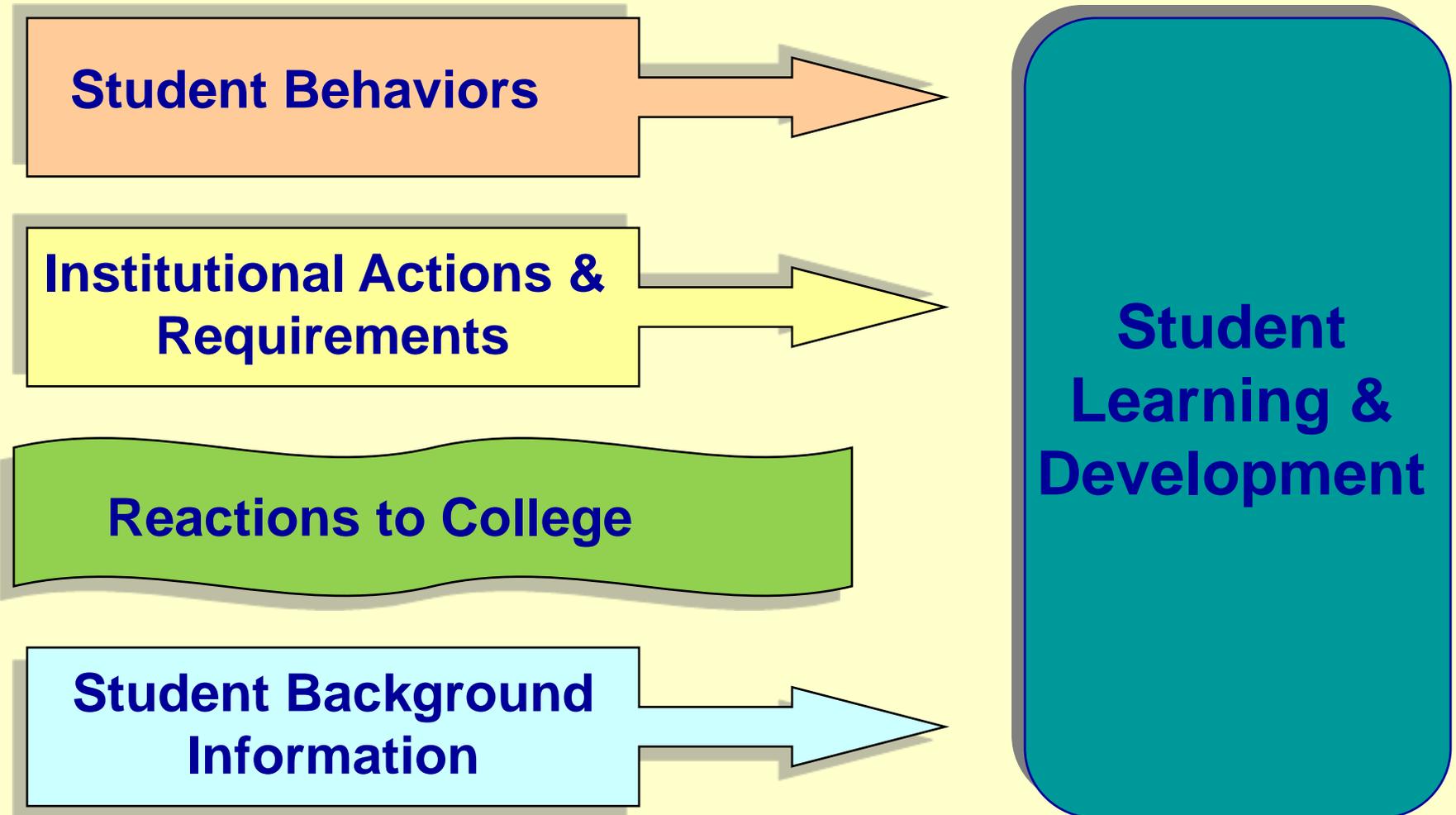


***Community College  
Survey of Student  
Engagement  
(pronounced “cessie”)***



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

# NSSE Questionnaire



# ***NSSE Clusters of Effective Educational Practices***

**Level of  
Academic  
Challenge**

**Active &  
Collaborative  
Learning**

**Student-  
Faculty  
Interaction**

**Enriching  
Educational  
Experiences**

**Supportive  
Campus  
Environment**

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

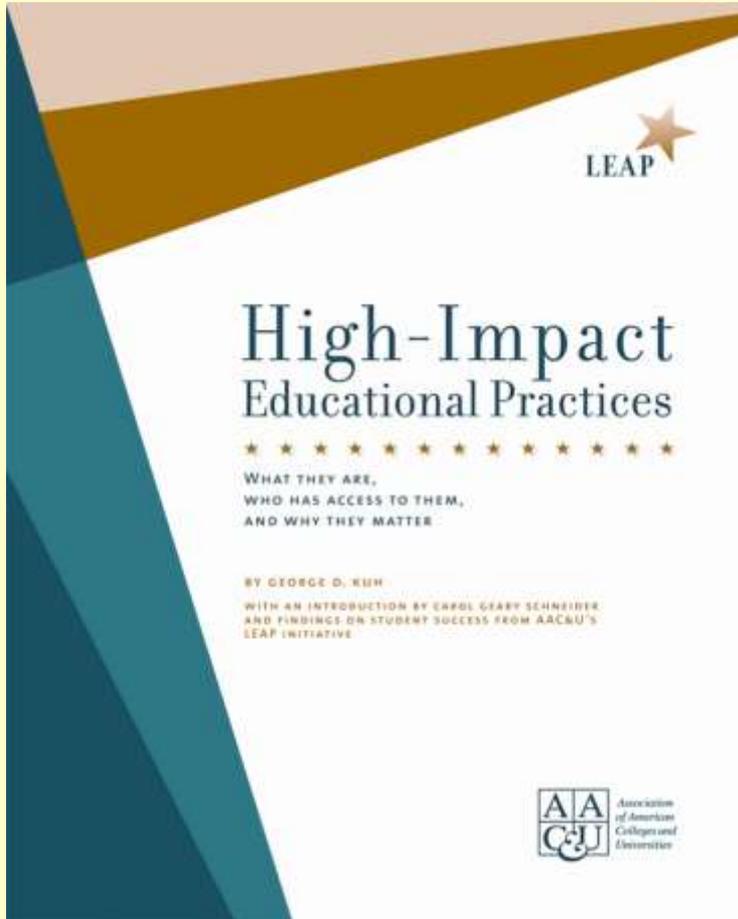


# It's more complicated than this...

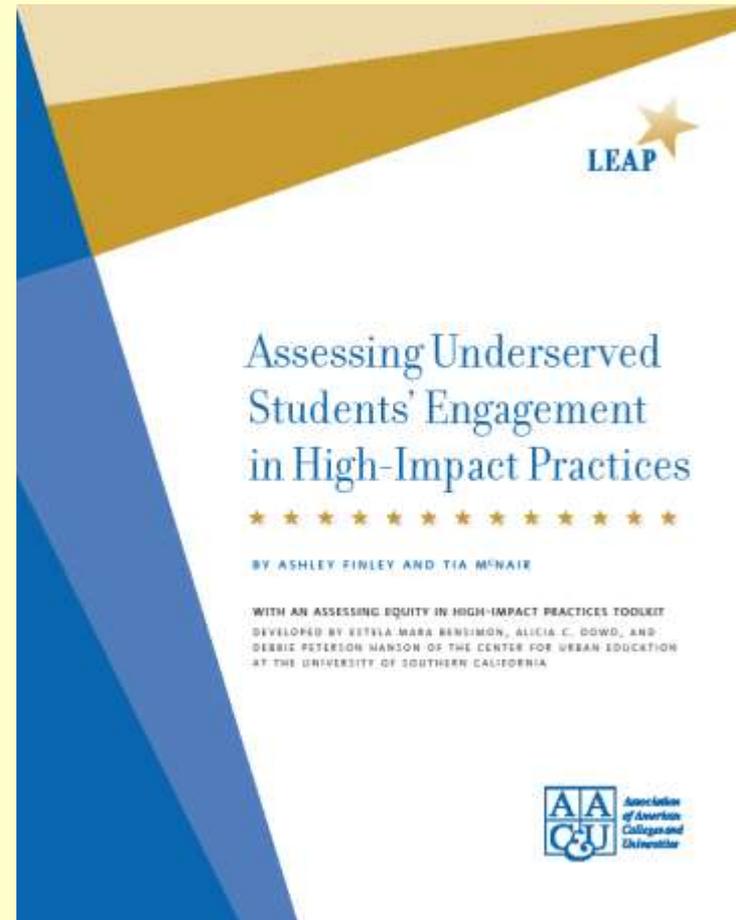
- *Many of the effects of college are “conditional”*
- *Some are compensatory*
- *Some have unusually positive effects – high impact practices*



# AAC&U HIPs Resources



# AAC&U HIPs Resources



## *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**



## *Essential Learning Outcome:*

# **NSSE Deep/Integrative Learning**

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- ◆ 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
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## 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

# *Effects of Participating in High-Impact Activities on Student Engagement*

	Level of Academic Challenge	Active and Collab. Learning	Student-Faculty Interaction	Supportive Campus Env.
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## 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 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***
- ✓ ***Publicly demonstrate competence***

AMERICAN  
AVIATION  
←

←  
LEARN TO  
FLY HERE!  
←



## 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<sup>st</sup> gen students***
- ✓ ***Fewer part-time students***
- ✓ ***Fewer transfer students***
- ✓ ***Fewer older students***



# High-Impact Practices and the Disparities Within...

## Seniors in All HIPs

- ✓ *Fewer 1<sup>st</sup> gen students*
- ✓ *Fewer students of color*
- ✓ *Fewer part-time students*
- ✓ *Fewer older students*



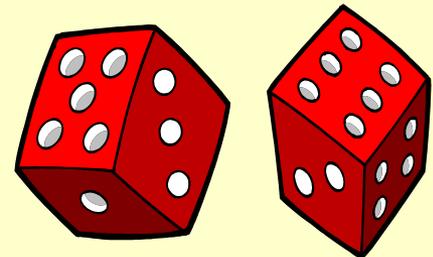
## Keep in Mind...

- ✓ 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!***

# Creating Conditions That Matter to Student Success



***We can't leave  
serendipity to chance***



# Implications

## 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...**

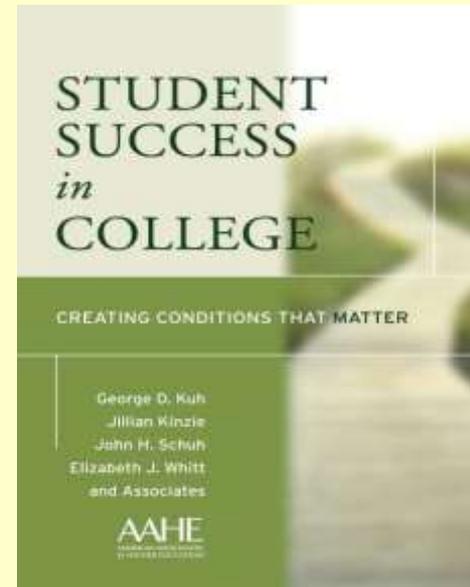
# **Make Effective Practice Mandatory**

- **Create “ideal” pathways to completion (ATLAS, DegreeWorks)**
- **Require orientation**
- **Employ intrusive advising**
- **End late registration**
- **Require math refresher before placement test**
- **Reduce D/W/F rates**
- **Deploy *effective* early warning systems**
- **Scale up Supplemental Instruction**
- **Communicate with students’ family members**
- **Use assessment approaches that measure desired outcomes**

# Implications

## 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

1. Intentionality matters as much or more than money alone
2. Spending on instruction and student services pays off in learning, persistence, and graduation

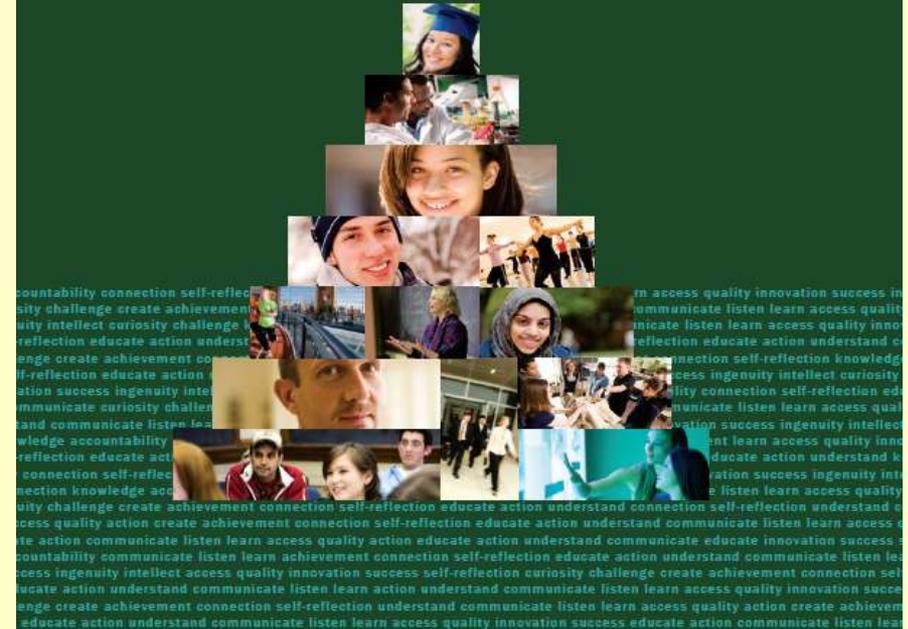
National Institute for Learning Outcomes Assessment

January 2010

## Connecting the Dots Between Learning and Resources

Jane V. Wellman

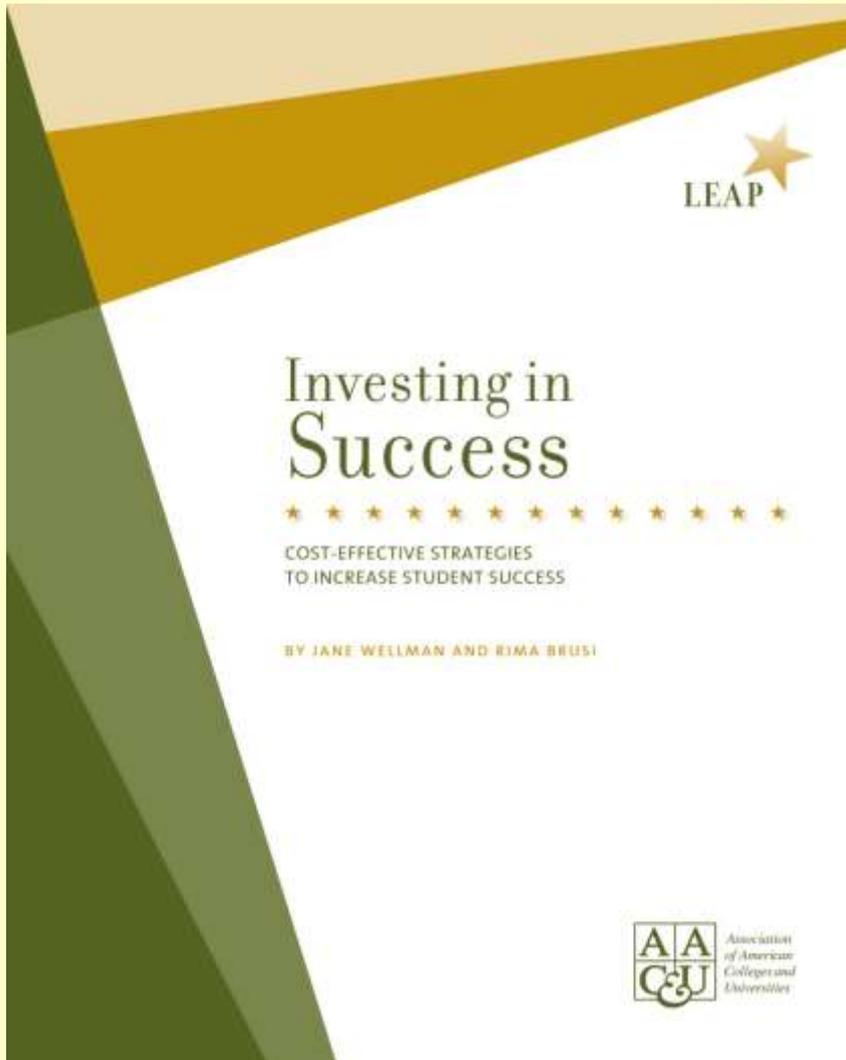
Foreword by Peter T. Ewell



Occasional Paper #3

learningoutcomesassessment.org

# AAC&U HIPs Resources

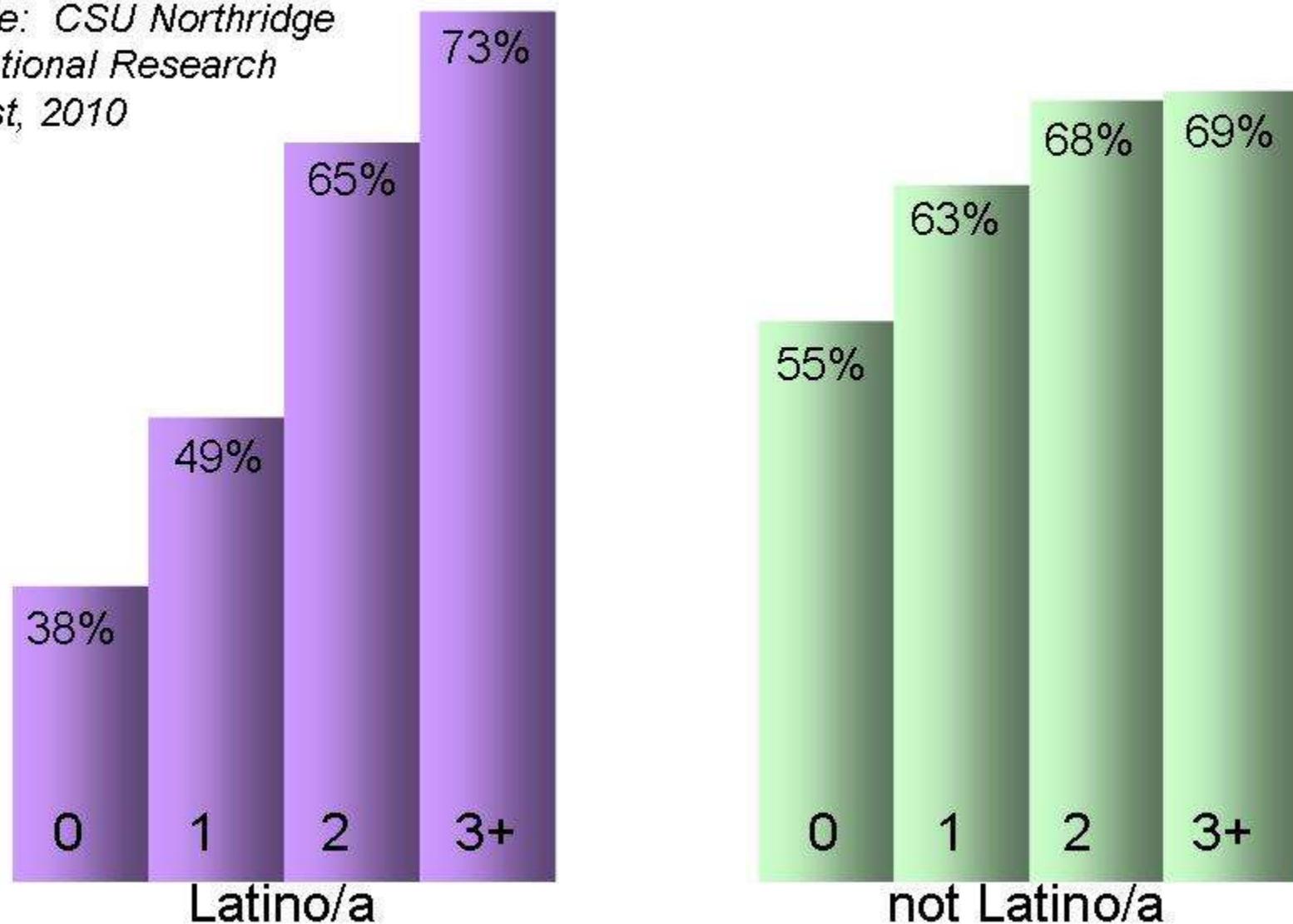


# Implications

1. Insist on doing what works
2. Put money where it makes a difference to student success.
3. **Sunset redundant and ineffective programs**
4. Have ***every student*** do (at least) one high-quality “high-impact” experience in the first year and another later 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

*% 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%**)

# Implications

**5. Make work something akin to a high-impact activity.**



# **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?”)**

# 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)

<i>Outcome</i>	% agree/strongly agree		Mean	
	Pilot Participants	Non-Pilot	Pilot	Non-Pilot
My supervisor helps me make connections between my work and my life as a student.	<b>60%</b>	<b>51%</b>	<b>3.8</b>	<b>3.3</b>
My job has helped prepare me for the world of full-time work.	<b>62%</b>	<b>51%</b>	<b>3.6</b>	<b>3.4</b>
My job has helped me improve my written communications.	<b>16%</b>	<b>21%</b>	<b>2.6</b>	<b>2.7</b>

# Student Employment Outcomes: “Guided Reflection on Work” (GROW)

<i>Outcome</i>	% agree/strongly agree		Mean	
	Pilot Participants	Non-Pilot	Pilot	Non-Pilot
I can see connections between my job and my major/coursework.	<b>56%</b>	<b>36%</b>	<b>3.4</b>	<b>2.9</b>
My job has helped me learn about career options.	<b>30%</b>	<b>39%</b>	<b>3.2</b>	<b>3.3</b>

# Student Employment Outcomes: “Guided Reflection on Work” (GROW)

<i>Outcome</i>	% agree/strongly agree		Mean	
	Pilot Participants	Non-Pilot	Pilot	Non-Pilot
Because of my job, I am able to work effectively with individuals with a variety of backgrounds, experiences, and cultures.	<b>82%</b>	77%	4.1	4.0
My job has helped me use critical thinking skills	<b>70%</b>	57%	3.8	3.5

# Implications

1. Insist on doing what works
2. Put money where it makes a difference to student success.
3. Sunset redundant, ineffective programs
4. Have *every student* do (at least) one high-quality “high-impact” experience in the first year and another linked to the major
5. Make work a high-impact activity

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

Aristotle, *Nicomachean Ethics*



# The Major Tasks

Teach students to:

- **Reflect** – think about their thinking and experiences in and out of the classroom, on and off the campus
- **Integrate** – connect and grasp the relevance of what they are learning from different courses, out-of-class experiences, and life beyond the institution
- **Apply** – transfer and use what one has learned in different settings that present novel challenges and opportunities

**May the Force  
be with us**



Star Wars  
13.02.2011



# Questions & Discussion

