

MISSING THE FOREST FOR THE TREES: RETHINKING WHAT INFLUENCES STUDENT SUCCESS

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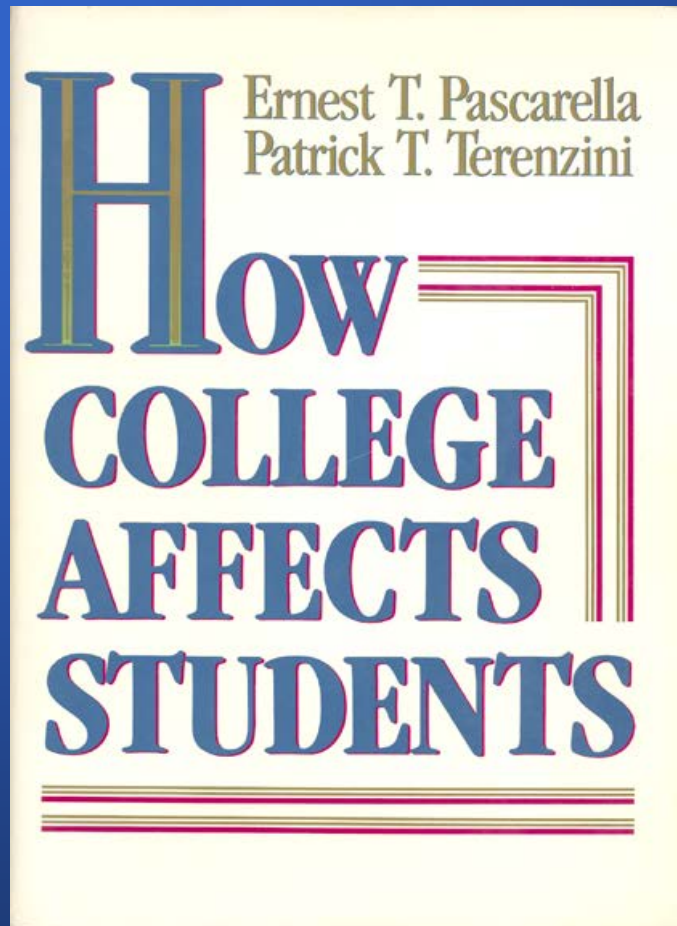


Center for the Study of Higher Education

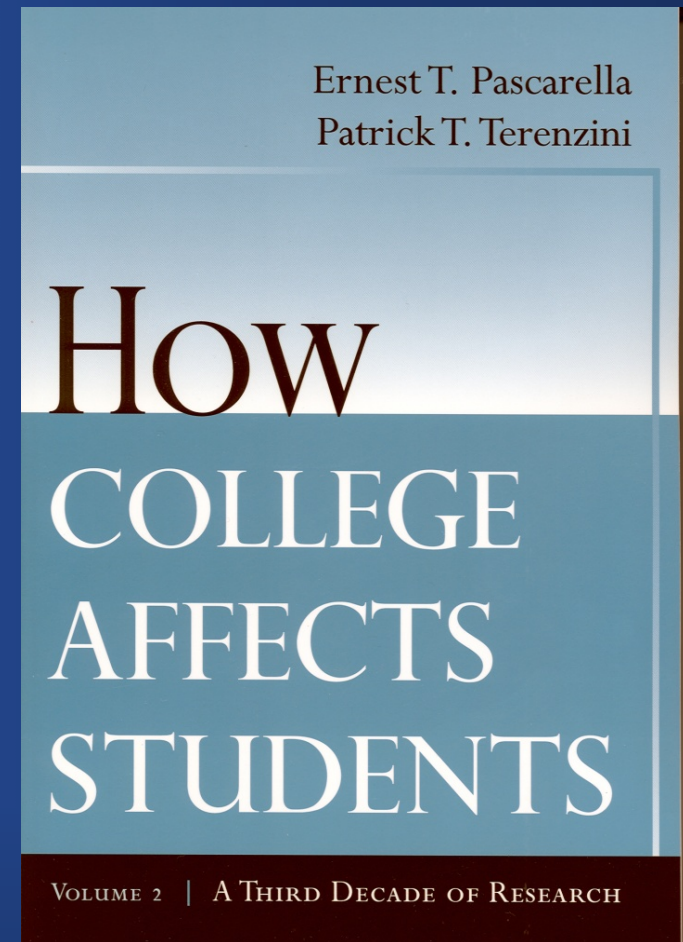


Order of Service

- *CliffsNotes* review of what we know about things that promote student learning and success
- A distillation: Six characteristics of effective learning experiences and a map
- Implications for studying, thinking, and practice in college student affairs.
Questions? Feel free to interrupt!



Vol. 1: 1970-1990



Vol. 2: 1990-2003

- **35 Years of research on college effects on students**
- **More than 5,000 books, journal articles, misc. reports**

How COLLEGE AFFECTS STUDENTS

VOLUME 3 | FINDINGS FROM THE 21ST CENTURY

MATTHEW J. MAYHEW
ALYSSA N. ROCKENBACH
NICHOLAS A. BOWMAN
TRICIA A. SEIFERT
GREGORY C. WOLNIAK
WITH ERNEST T. PASCARELLA AND PATRICK T. TERENCEZINI

JOSSEY-BASS
A Wiley Brand

- Another 15 years of research on college effects
- Nearly 1,800 more books, journal articles, and misc. reports

Questions Driving Reviews for All Three Volumes

1. Do students change during the college years?
2. How much of that change is due to college?
3. Do different kinds of institutions have different effects?
4. Do different experiences have different effects?
5. Does the same experience have a different effect for different kinds of students?
6. What are the long-term effects of college?

“Success” in College Comes in Many Forms

- Completion of a degree
- Increased knowledge acquisition and higher-order thinking skill development
- Increased personal and interpersonal maturity
- More-fully developed moral reasoning skills
- New and/or revised attitudes and values
- Occupational preparation
- Economic and occupational benefits
- Enhanced quality of life
- Focus on the **ranges of influences** and **outcomes**.

A Modest Map: The Faculty View



Academic and Cognitive Outcome Areas

- **Knowledge acquisition** (both general and major-field specific)
- **Academic skills** (the “3-Rs” on steroids)
- **Higher-order thinking** (e.g., critical thinking, synthesizing information, evaluating evidence, analogical thinking)

Formal “Academic” Influences that Promote Academic and Cognitive Learning

Instructional approaches (selected)

- Active learning in any form (avg. = +10%ile pts.)
- Group learning (e.g., collaborative/cooperative) (+18-20 %ile pts.)
- “Inductive” or “Inquiry Learning” (e.g., problem-based, discovery-based, project-based, case study-based learning) (2-24%ile pts.)
- Supplemental Instruction (+11-23 %ile pts.)
- Peer Tutoring
- IT-enhanced instruction (+12 %ile pts., both in-class & on-line)
- Service learning (wide variations, but mean of +14 %ile pts. across disciplines)
- Concept mapping
- Summary writing, drawing, question-prompted responses, homework

Instructors Who Promote Academic and Cognitive Learning Are . . .

- **Prepared and organized** (e.g., provide outlines, clear objectives, use class time effectively, make connections, signal transitions)
- **Clear and understandable** (e.g., use examples, identify key points)
- **Give frequent and high-quality feedback** to students (detailed and individualized feedback is more effective than group- or class-summary feedback)
- **Expressive and enthusiastic** (e.g., are animated, maintain eye contact, show their interest in their subject and its relevance)
- **Available and “approachable”**
- **Demonstrate interest and concern** for, and **have rapport** with, students
- **Use “Deliberate Practice”** (a combination of these practices & pedagogies)

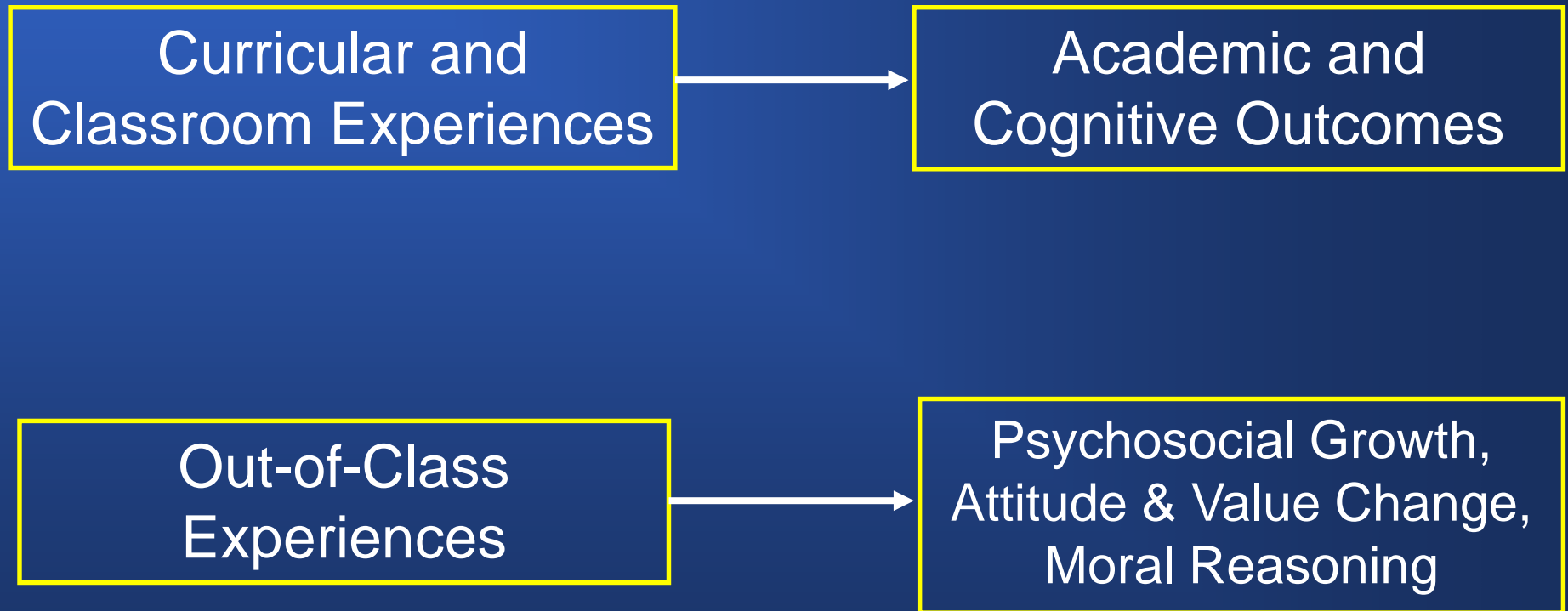
Curricular Effects on Academic and Cognitive Learning

Effective curricula are **interdisciplinary**, have an **integrated core**, and **emphasize links** across courses and ideas.

Typical operational forms *can* include:

- Liberal arts curricula and experiences (+10%ile pts.);
- Residential colleges (a.k.a., “living-learning” centers);
- Learning communities (Fr. Yr. = +12%ile pts.; Sr. Yr. = +16%ile pts.);
- Honors programs (+6%ile pts.);
- Working with a faculty member on his/her’s research;
- Study-abroad programs, and
- Other “integrated academic interventions” (+6-10%ile pts.)

A Modest Map: The View of the Faculty and *Some* Student Affairs Administrators



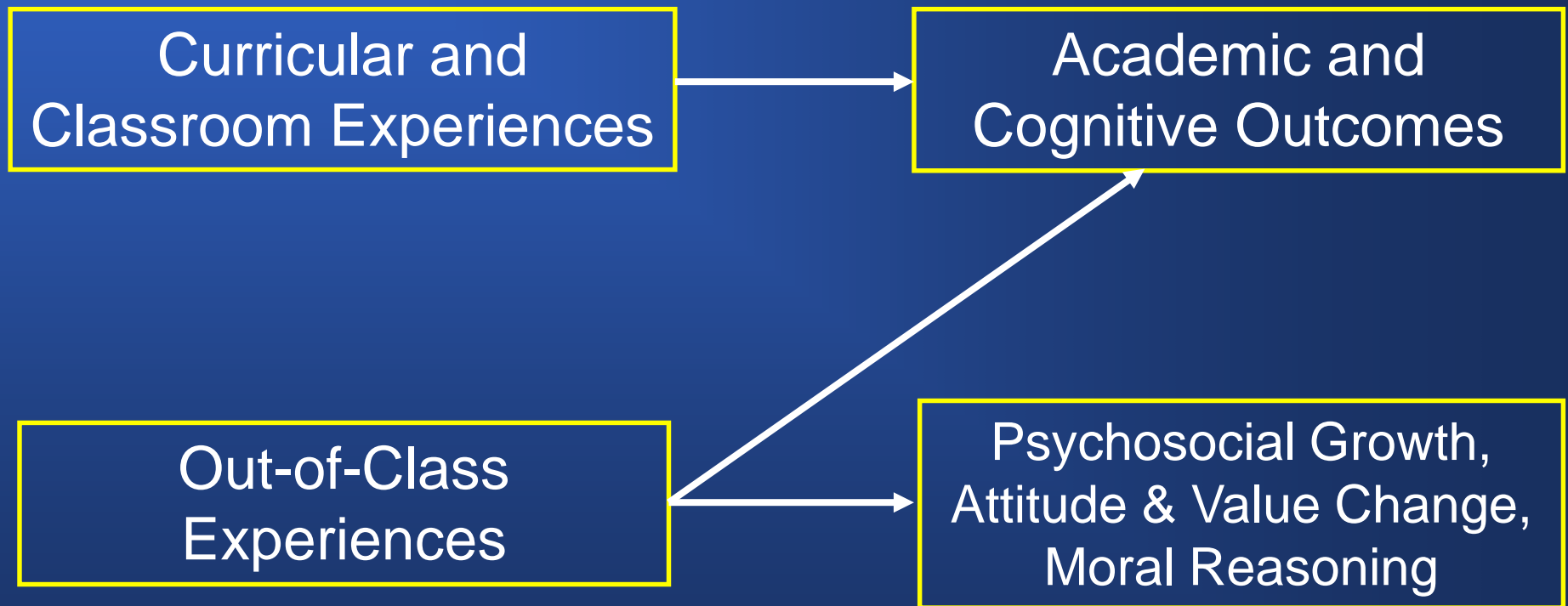
Selected Outcomes within “Psychosocial Development, Attitude & Value Change, and Moral Reasoning”

- Psychosocial development (“Self” and “Relational” components):
 - ✓ Identity development (racial/ethnic, gender, LGBT, religious/spiritual)
 - ✓ Academic self-concept
 - ✓ Social self-concept
 - ✓ Psychological well-being
 - ✓ Autonomy, independence, locus of control, and self-efficacy
 - ✓ Interpersonal skills
 - ✓ Leadership skills
 - ✓ General development and maturation
- Attitude and Value Changes:
 - ✓ Sociopolitical, civic, and community and values (e.g., social justice attitudes/values)
 - ✓ Racial-ethnic and cultural diversity attitudes
 - ✓ Gender-role attitudes
 - ✓ Lesbian, gay, bisexual, and transgender persons
 - ✓ Religious and spiritual attitudes and values
 - ✓ Educational and occupational
 - ✓ Understanding and interest in the arts
- Moral Reasoning (not what, but how and why)

Out-of-Class Experiences that Promote Changes in Psychosocial Areas, Attitudes, and Moral Reasoning

- Living on-campus (especially in learning communities or living-learning centers)
- Interactions with peers who differ from us in personal or background traits, behaviors, or what they believe and value.
- Interactions with faculty members outside of class (large effects)
- Major field and department culture
- Student organizations involvement
- Service learning
- Community service (generic)
- Cultural-awareness workshops
- Spiritual mentoring, reflective learning practices (e.g., writing, journaling)
- Leadership development courses and experiences
- Internships
- Employment on-campus (+) and off (-)
- A campus environment that:
 - ✓ is challenging, scholarly, and intellectual;
 - ✓ has faculty members who set high standards; and
 - ✓ has a positive racial/ethnic and gender climate.

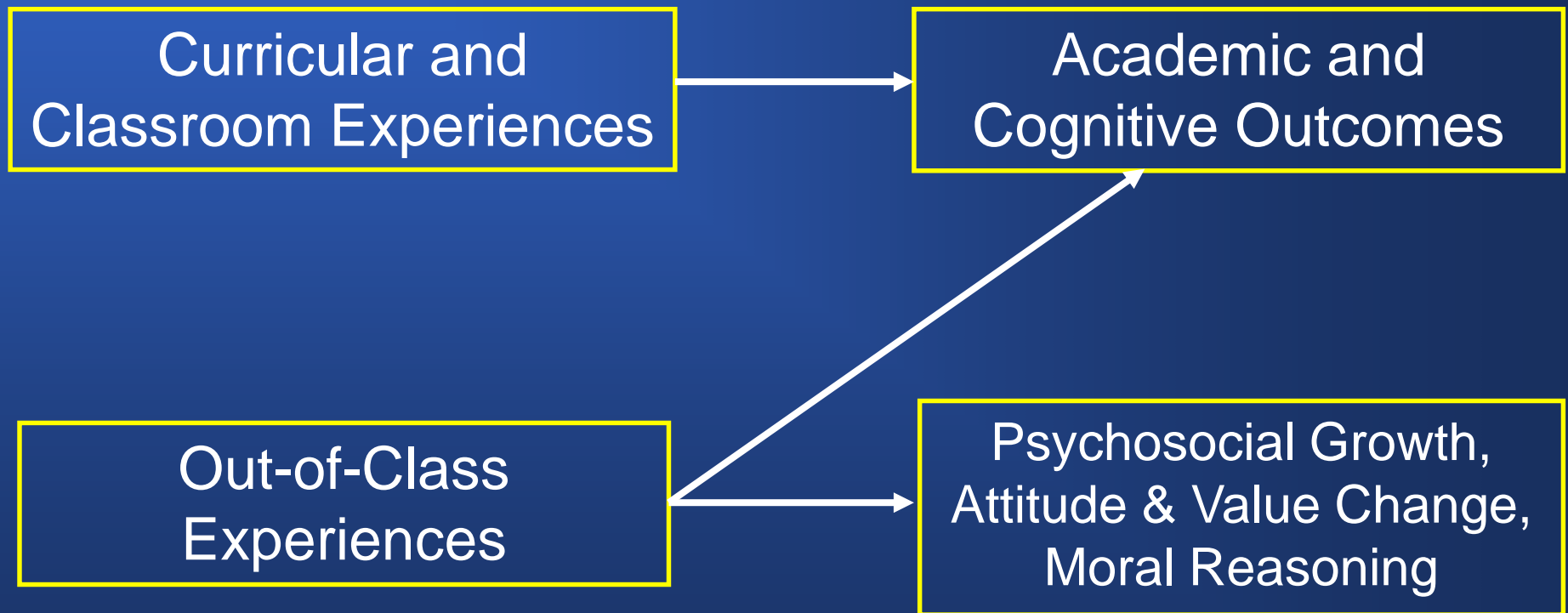
A Modest Map: Some Student Affairs Professionals' View



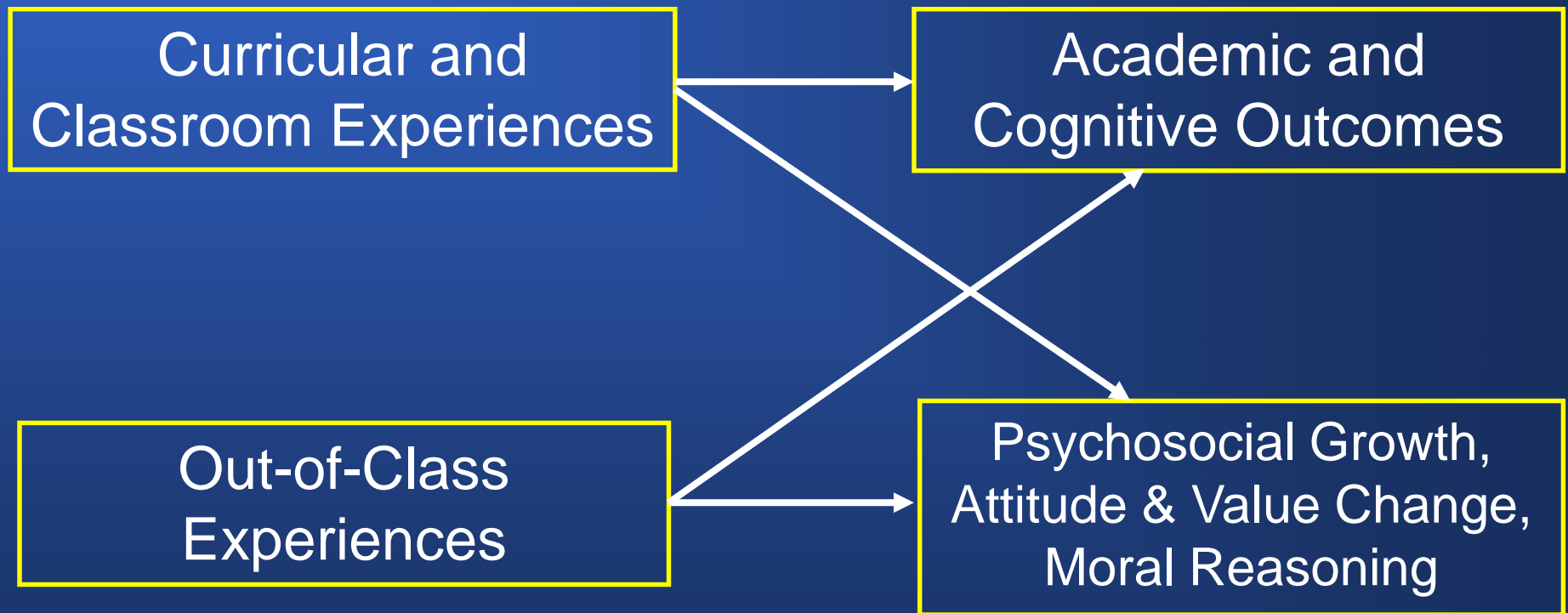
Out-of-Class Experiences that Shape Academic and Cognitive Learning

- Campus climate that challenges students intellectually (+)
- Level of student effort and engagement (+)
- Interactions with peers (+) and peer tutoring (+)
- Interactions with faculty members (+)
- Working on faculty member's research (+)
- “Diversity” experiences (+)
- Living on-campus, especially in learning communities (+)
- Service-learning experiences (+9-12%ile pts.)
- Volunteer community service (+)
- “Developmental” academic advising (not just meeting requirements)
- Work on-campus (+, if 15-20 hours or less)
- Work off-campus (-)
- Travel abroad (+)
- Fraternity membership (-)
- Intercollegiate athletics (men's football & basketball) (-)

A Modest Map



A Modest Map: What Many Faculty & Some Student Affairs Professionals May Not Know



Curricular and Classroom Influences on Changes in Psychosocial Dimensions, Attitudes and Values, and Moral Reasoning

- **Pedagogical strategies**, including active and collaborative learning; high academic expectations; level of challenge; reflective learning; integrating ideas, information, and experiences
- **Selected courses** (e.g., discipline-based diversity courses; racially, ethnically, and culturally diverse classrooms; internships; service learning)
- **Learning in multiracial and multiethnic classrooms**
- **Major department's** intellectual and interpersonal culture and climate
- **Campus environment** that challenges students academically and intellectually
- **Study abroad** or other **international experiences**

The Point: Learning Involves Interlaced Influences, Settings, and Outcomes

- Multiple influences, operate in
- Multiple settings, and affect
- Multiple outcomes.

Bottom Line = Think systemically!

Across Most Outcomes: Experiences that Promote Student Learning . . .

1. Entail encounters with challenging ideas and people.

Academic: Challenging academic environment
Challenging instructors with high standards
Classroom encounters with “Difference,”
socially and intellectually “provocative moments”
Active learning in any form
Learning communities
“Inductive” or “Inquiry” learning
Service-learning courses
Integrated gen. ed. and major-field curriculum
Study abroad and other international experiences

Out-of-Class: On-campus living; living-learning centers
Interactions with peers
Interactions with faculty members outside class
Involvement in student activities and organizations
“Diversity” experiences
Volunteer community service
Developmental academic advising
On-campus work
Internships

Across Most Outcomes: Experiences that Promote Student Learning . . .

2. Require active engagement with the challenges.

- Academic:**
- Quality and level of student effort
 - Active learning
 - Interactions with faculty and engagement with feedback
 - Contributions in group-learning settings
 - Service learning
 - Study abroad
 - Integrated gen. ed. and major-field curriculum
- Out-of Class:**
- Interactions with peers
 - Interactions with faculty members
 - Contributions to faculty member's research
 - "Diversity" experiences (encounters with difference)
 - Community service
 - On-campus work (+ if less than 15-20 hours)
 - Internships

Across Most Outcomes: Experiences that Promote Student Learning . . .

3. Occur in a supportive environment.

Academic: Available, approachable, “caring” instructors
Group learning, learning communities
Supplemental Instruction, peer tutoring
Cooperative/collaborative teaching
Service learning
IT-enhanced instruction

Out-of Class: Interactions with peers
Residential communities
Interactions with teaching-oriented faculty members
“Diversity” experiences (encounters with difference)
Developmental academic advising
Community service
On-campus work (+ if less than 15-20 hours)

Across Most Outcomes: Experiences that Promote Student Learning . . .

4. Emphasize meaningful, real-world activities.

Academic: Problem-based, “inductive,” or “inquiry” learning
Study abroad
Service learning
Cooperative/collaborative learning
Mentoring via work on faculty member’s research project
Internships
Major-field-linked international experiences

Out-of Class: Interactions with peers
Interactions with faculty members
“Diversity” experiences (encounters with difference)
Internships
Community service
International experience
Developmental academic advising
On-campus work

Across Most Outcomes: Experiences that Promote Student Learning . . .

5. Involve other people, interpersonal activities.

Academic: Learning communities
Supplemental Instruction
Cooperative/collaborative learning
Active learning
Service learning
Working with faculty member on his/her research
Study abroad

Out-of Class: Interactions with peers
Interactions with faculty members
Student activities, clubs
“Diversity” experiences (encounters with difference)
Developmental academic advising
Community service (esp. when “Service Learning”)
On-campus work (+ if less than 15-20 hours)

Across Most Outcomes: Experiences that Promote Student Learning . . .

6. Invite or promote reflection and analysis.

Academic:

- Supplemental Instruction
- Cooperative/collaborative teaching
- Active learning
- “Inductive” or “Inquiry Learning”
- Service learning
- Study abroad

Out-of Class:

- Interactions with peers
- Interactions with faculty members
- “Diversity” experiences (encounters with difference)
- International experience
- Developmental academic advising
- Community service (esp. when “service learning”)
- On-campus work (+ if less than 15-20 hours)

Center for Sustainability

http://www.youtube.com/watch?v=Tm0X2llu1Ns&feature=player_embedded

Characteristics of Effective Learning Experiences for Students

Virtually all student experiences that influence learning and change involve one or more of these six characteristics:

1. Entail encounters with challenging ideas and people
2. Require active engagement with those challenges
3. Occur in a supportive environment
4. Emphasize meaningful, real-world activities
5. Involve other people, interpersonal activities
6. Invite or promote reflection and analysis

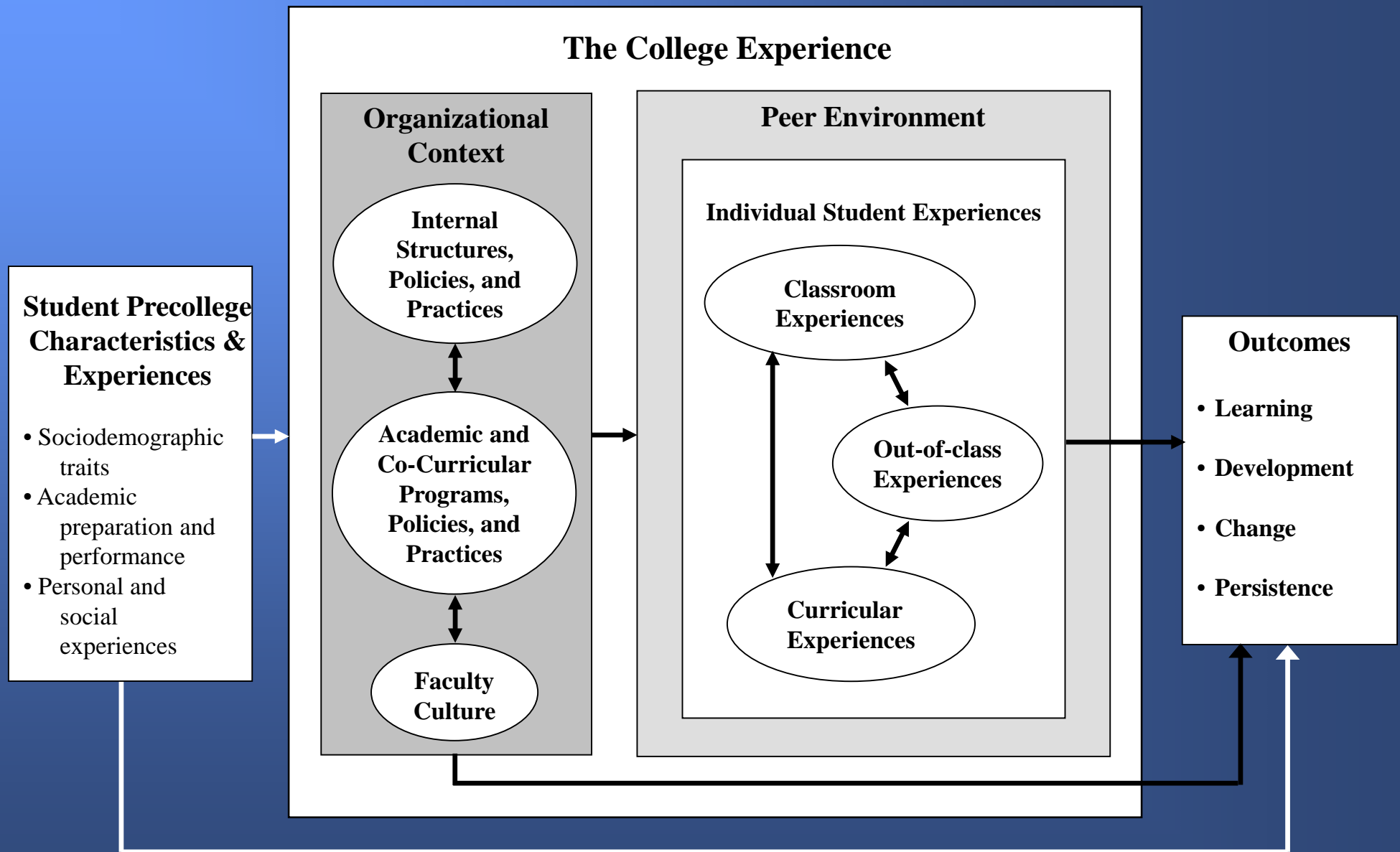
The Moral of the Story

- ◆ *What* an institution, division, or unit does is less important to student learning and development than that *whatever it does* has one or more of the characteristics of effective learning experiences.
- ◆ “. . . there are many roads to becoming an educationally engaging institution” (Kuh et al., 2005).

Administrative & Programmatic Myopia

The potentially debilitating focus on parts

- ◆ Operational concentration on “My Area or Unit”
- ◆ Uncritical acceptance of “best practices”



A comprehensive model of influences on student learning and persistence
(Terenzini & Reason, 2005, 2010).

Implications for studying, thinking, and practice in college student affairs

1. **Align what we do with what we know.** Use the six characteristics as touchstones when designing, developing, and evaluating the curriculum, teaching, and programs.
2. **Capitalize on students' out-of-class experiences** as major contributors in promoting cognitive and psychosocial development. **Integrate** academic and co-curricular experiences.
3. **Think systemically** and **work collaboratively**.
4. **Understand the system and how it works.**