



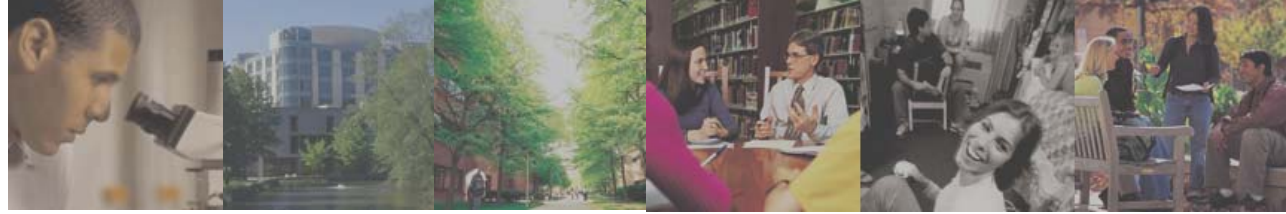
Applied Learning as a Best Practice Model

A Strategy for Higher Education Student Success

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Special thanks to Robert Williams and Jung Byun for their data assistance, as well as Miryn Alcantara for her graphical technical assistance.

Background & Context...

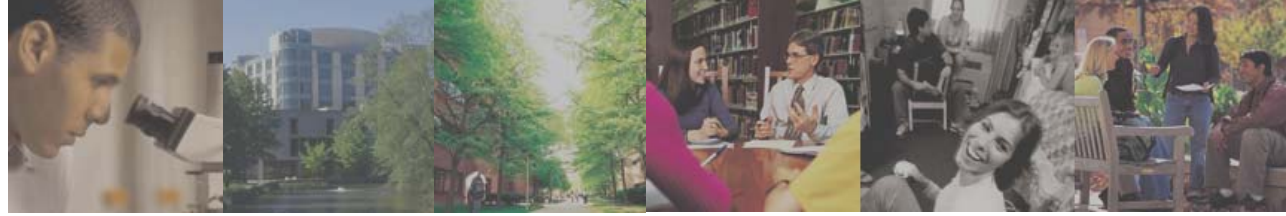


...The Good

What is Applied or Experiential Learning?

- Activities that engage the learner directly in the phenomena being studied and are associated with structured reflection on the connection between the phenomena and theoretical concepts (Kendall, 1990, 181).
- Viewed as pedagogy; practical application of resources; mechanism for citizenship development

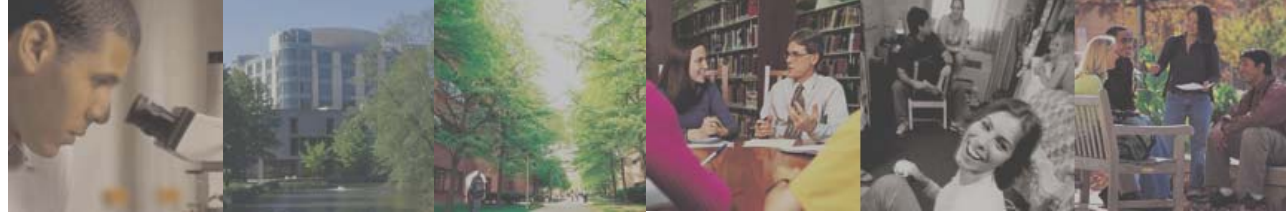
Background & Context...



Benefits of this approach

- Increased student exposure, awareness, understanding of traditions and cultures different from their own
- Students as creators of knowledge
- Skill acquisition and development
- Increased interest and excitement about learning
- Supports research and teaching of faculty

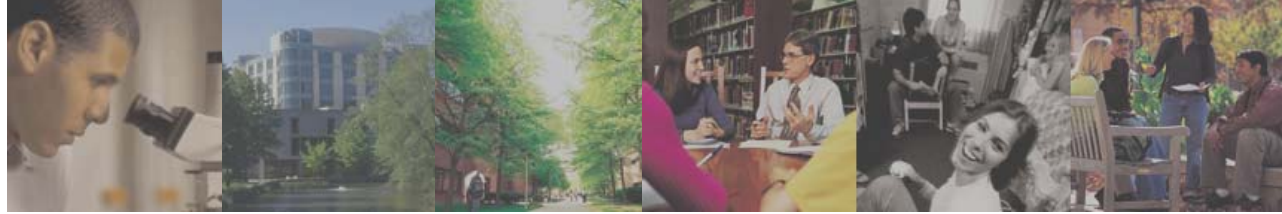
Background & Context...



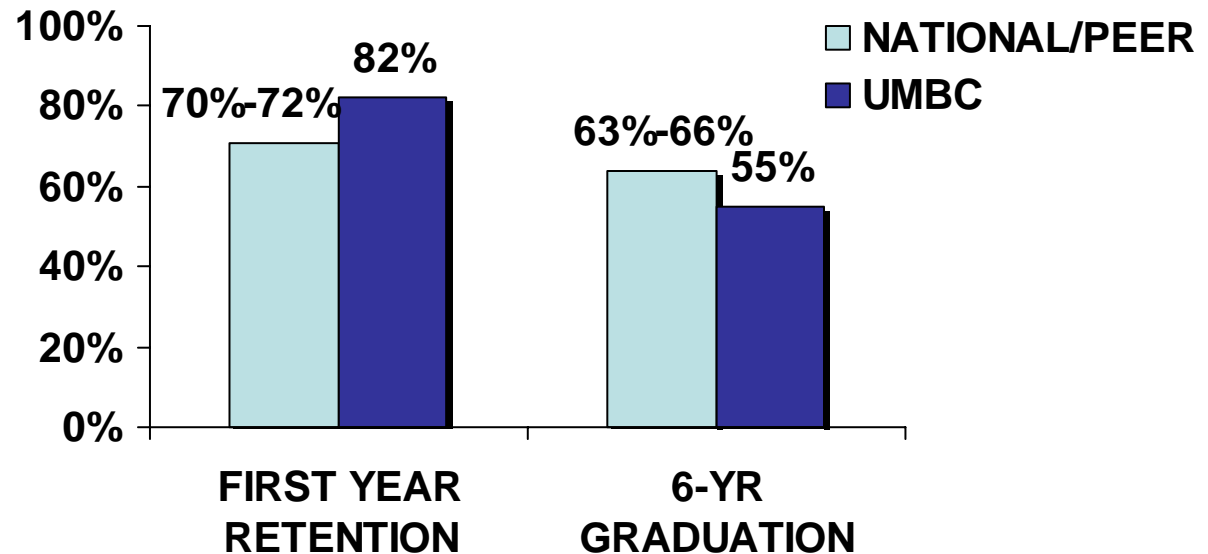
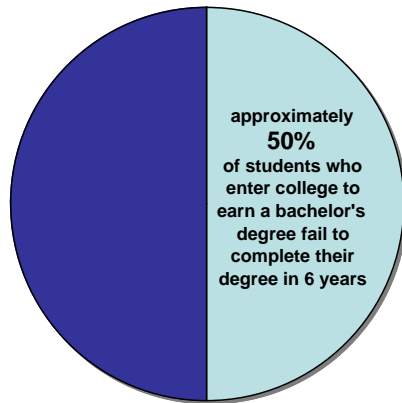
Which of the following activities is not traditionally viewed as applied learning?

Cooperative Education		Internship	
Performance	Resident Hall Assistant	Research	
Service-Learning		Study Abroad	

Background & Context...



...The Bad: Higher Education Student Persistence: Is There a Problem?



Reframing Retention & Graduation Rates



Making The Bad Not See So Bad

Student Success Focuses on Strategies to:

- *Prevent* departure/attrition
- *Promote* overall success developmentally and academically

A Theoretical Perspective



Student Involvement Theory

What is student involvement?

“The amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1984).

Student Involvement Theory



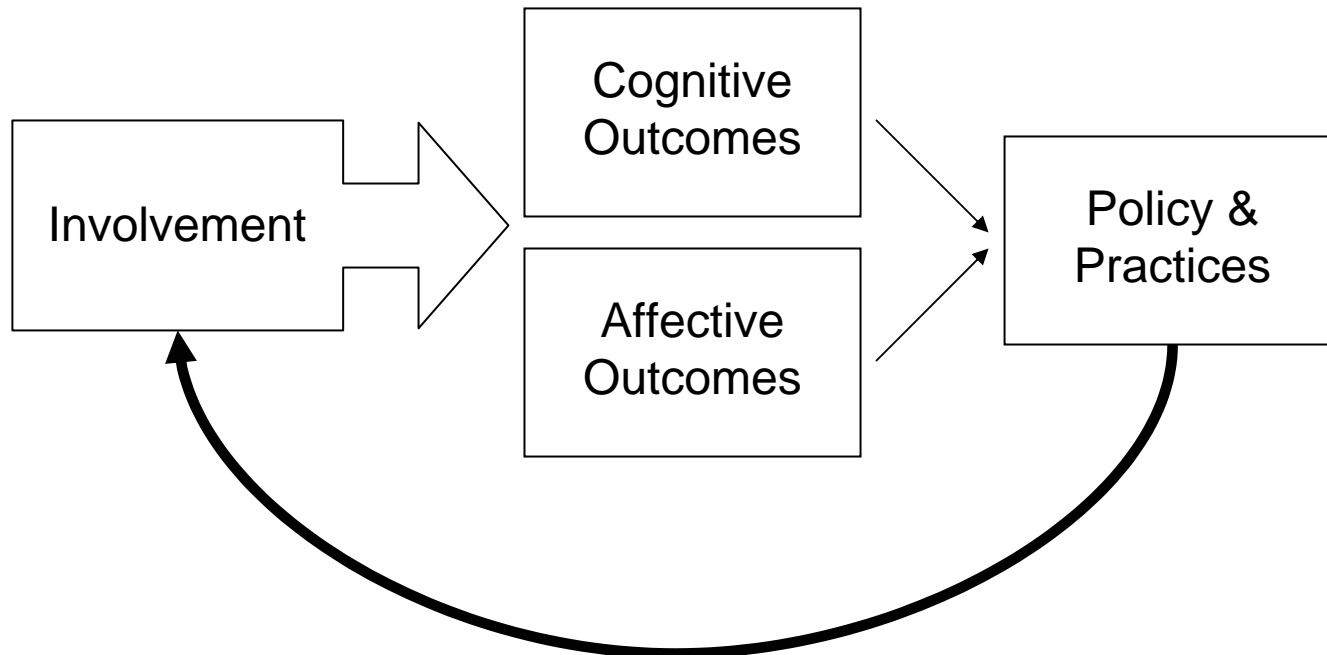
- What is Astin's Student Involvement Theory?

The greater a student's involvement, the greater his/her level of personal development and student learning (or higher levels of affective and cognitive development)

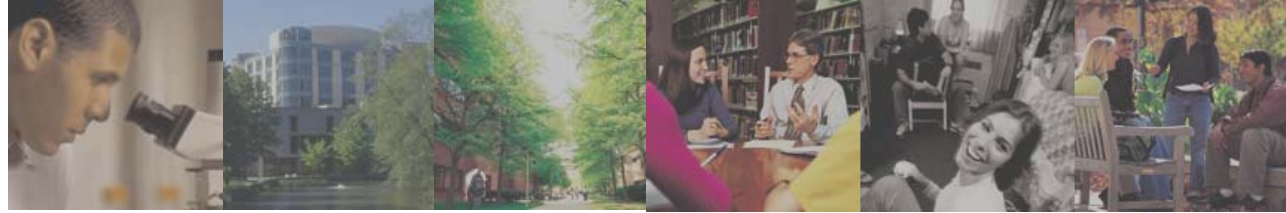
Student Involvement Theory



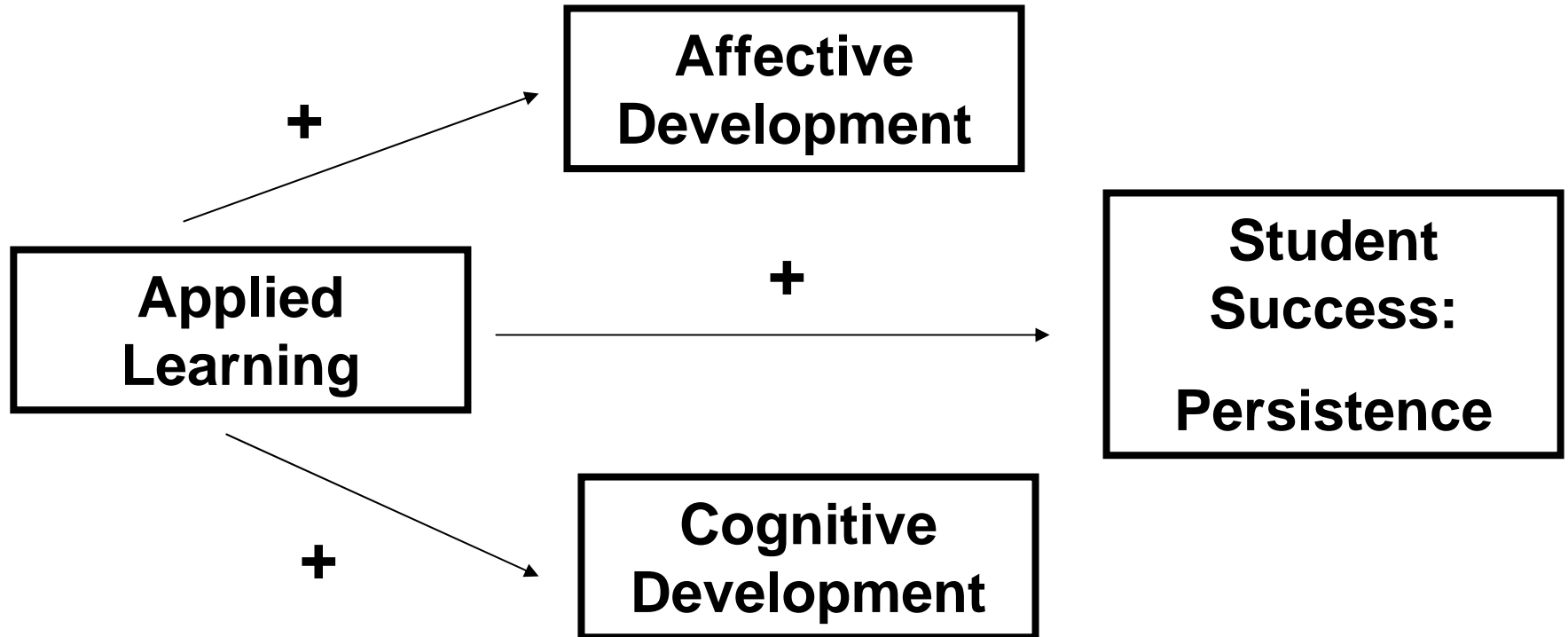
Postulates and Assumptions



Theoretical Model



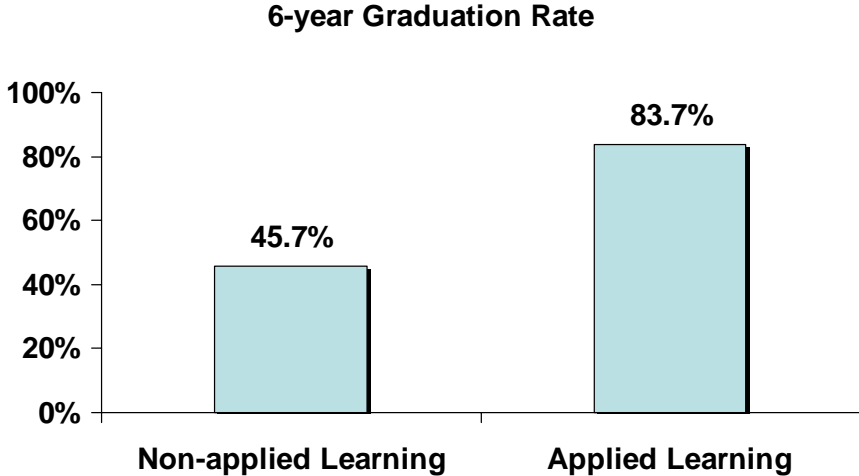
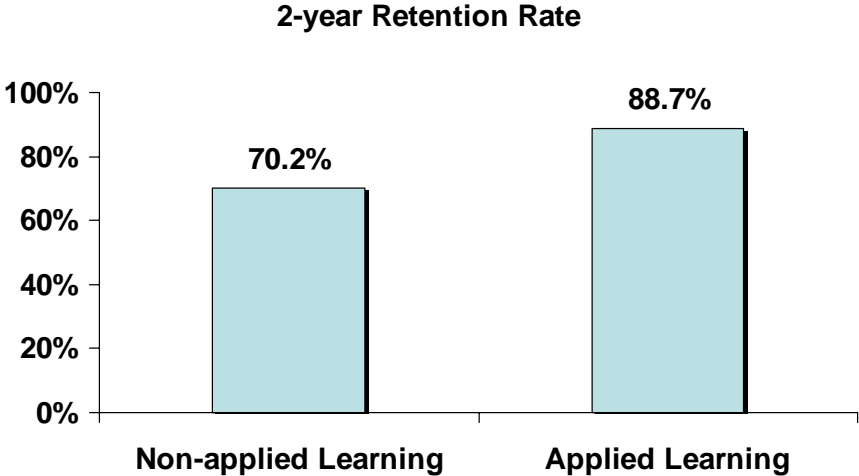
Applied Learning, Development & Student Success



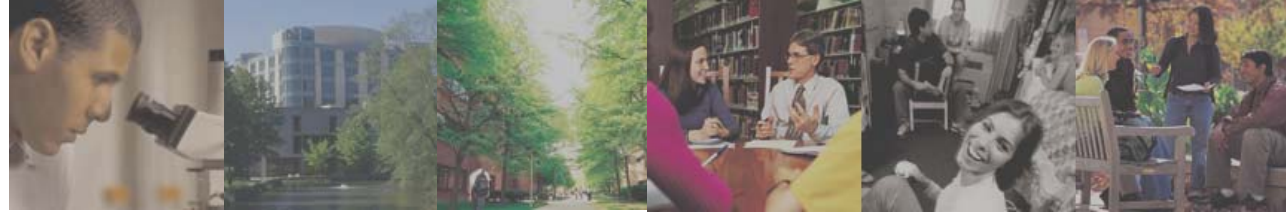
Applied Learning, Involvement & Student Success



Special Programs Exploratory Study: The effect of applied learning on undergraduate retention and graduation rates

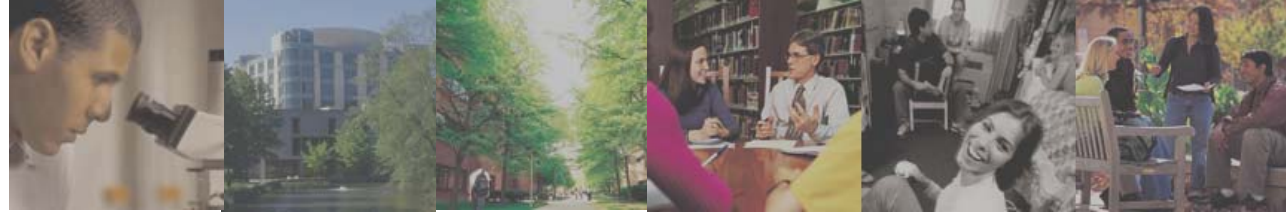


Research Questions



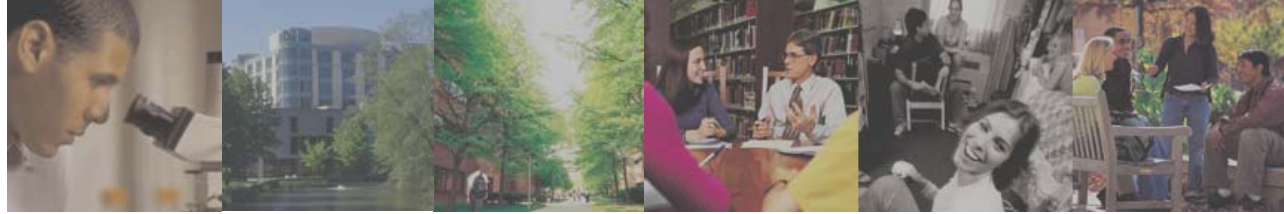
- What is the impact of different types of applied learning on seniors' affective & cognitive development?
- How is student development related to degree completion?
- What are the relationships among applied learning, student development, and degree completion?

Methodology



- Data & Sample
 - 2004 *National Survey of Student Engagement* (NSSE)
 - Web-based survey administered by NSSE
 - Response rate (SR) = 36%
 - Senior-level Students
 - 12 - 24 credits of graduating (n = 328)

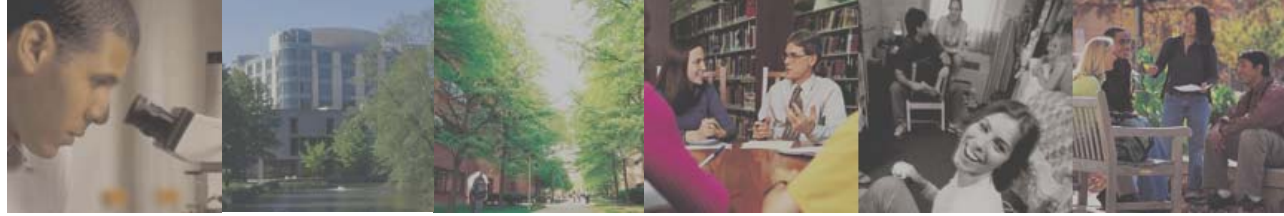
Methodology



Dependent Variables

- Graduated (yes/no)
- Time to Degree (in years at this institution)

Methodology

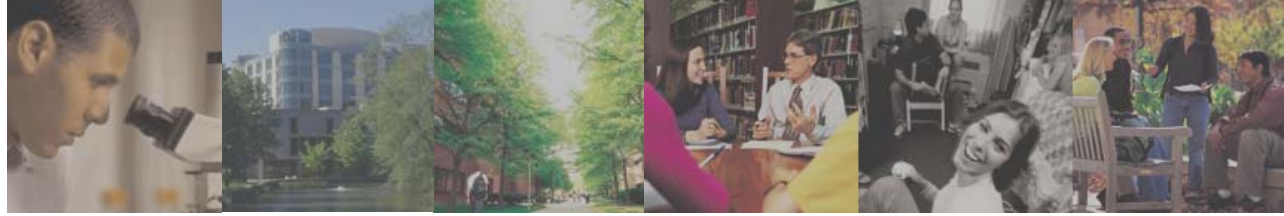


Independent Variables

- Applied Learning Experiences (yes/no)
 - Professional practice
 - Community service
 - Research
 - Study abroad program
 - Service-learning

- Multiple applied learning experiences

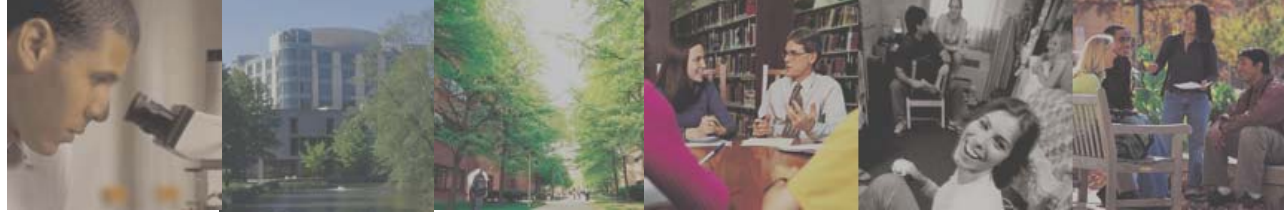
Methodology



Mediating Variables

- Cognitive Development ($\alpha = .88$; 10 items)
- Affective Development ($\alpha = .84$; 6 items)
- Principal components factor analysis and reliability analysis were conducted for each scale
- Mean scaled scores were created

Methodology



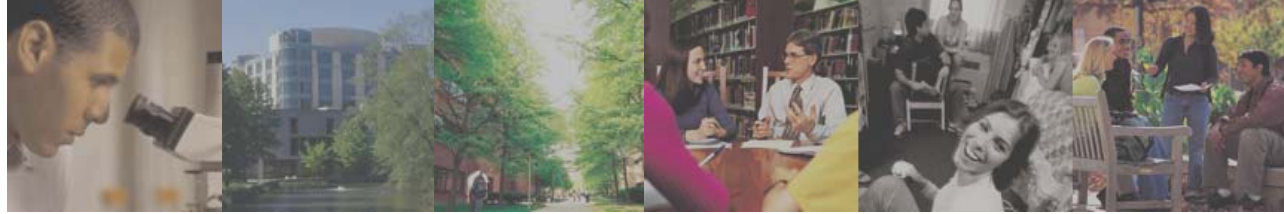
Control Variables

- Student Demographics
 - Gender
 - Race
 - Non-traditional college student (≥ 25 yrs.)
 - First-generation college
 - Enrollment status (FT/PT)
 - Transfer student
 - Major program area (STEM v. non-STEM)
 - Dorm resident
 - In-state residency
 - Cumulative GPA

Bivariate Relationships between Applied Learning, Student Development & Degree Completion

	Affective Development	Cognitive Development	Graduated	Time to Degree
Professional Practice		+	+	-
Community service	+	+	+	
Research				
Study Abroad				
Service-learning	+			
Multiple applied experiences	+	+	+	-
Affective development	---	---		
Cognitive development	---	---		

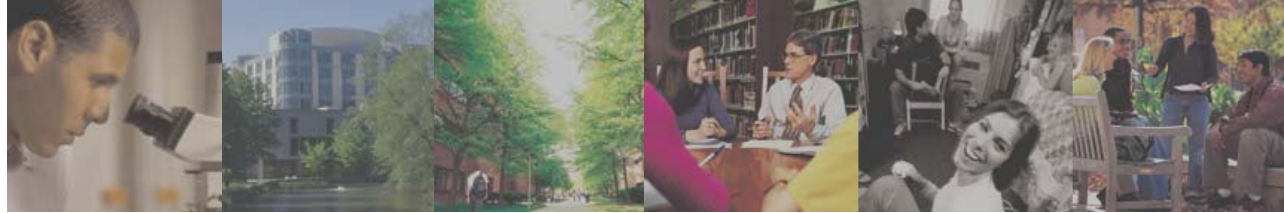
Multivariate Analyses



Applied Learning, Student Development & Degree Completion

- Bivariate relationships between applied learning and reports of cognitive & affective development remained significant when controlling for student characteristics.

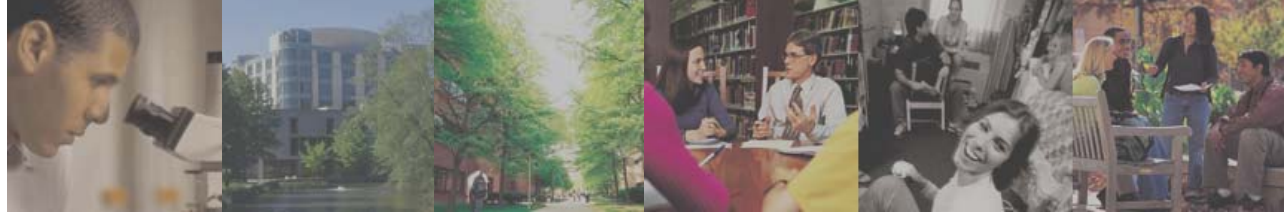
Multivariate Analyses



Applied Learning, Student Development & Degree Completion

- Senior-level students who had completed a professional practice experience were significantly more likely to graduate in less time than seniors who reported not having completed such an experience.
- Senior-level students who engaged in more applied learning experiences were significantly more likely to graduate in a shorter period of time than those who did not.

Implications



Implementation & Next Steps

- Promote the institutionalization of applied learning as part of undergraduate education enhancement
 - Creating an “honors university experience” for every student
 - Applied learning as graduation requirement
 - Effectiveness & Efficiency Initiative
- Dissemination as a best practice for adaptation/implementation of applied learning as an active learning curriculum component

Limitations of Current Research



- Used a sample of senior-level students
- Focused on multi-item indicators of cognitive and affective development instead of individual components

Directions for Future Research



- Incorporate Alumni Survey to enhance current research
- Longitudinal retention and graduation analysis

Directions for Future Research



- Tinto's interactionist theory of student departure
- Pilot study of impact of applied learning on affiliated versus non-affiliated student success

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QUESTIONS?