



# Applied Learning as a Best Practice Model

A Strategy for Higher Education Student Success

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# 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...



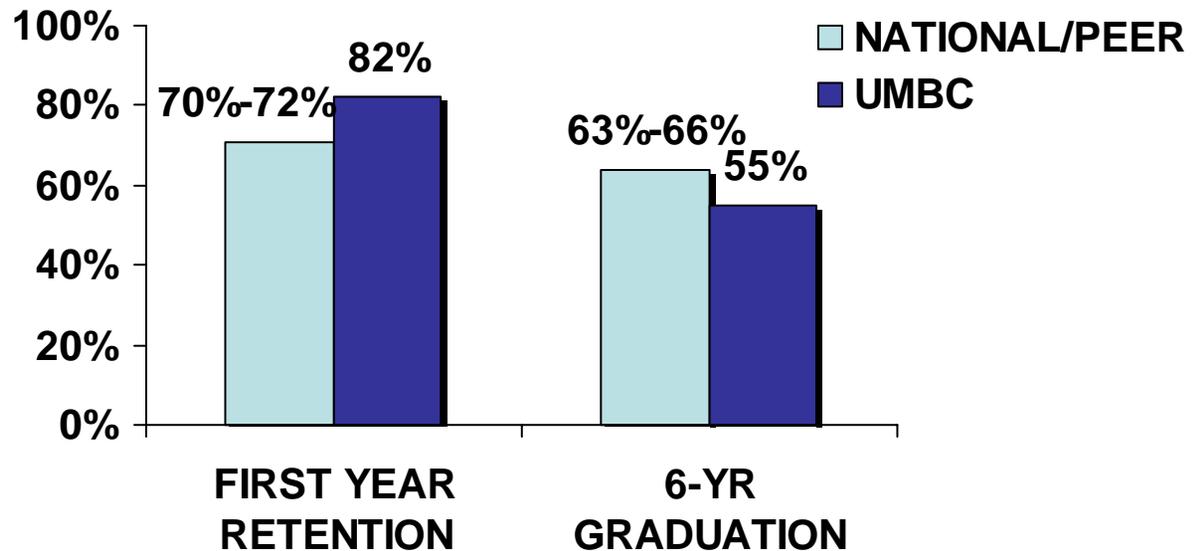
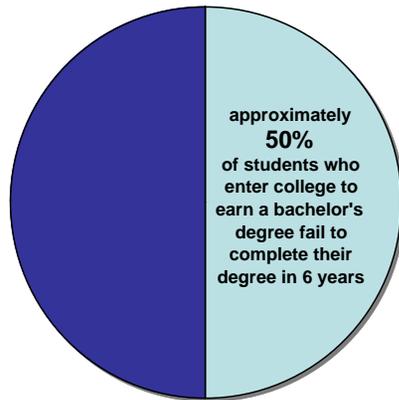
Which of the following activities is not traditionally viewed as applied learning?

<b>Cooperative Education</b>		<b>Internship</b>	
<b>Performance</b>	<b>Resident Hall Assistant</b>	<b>Research</b>	
<b>Service-Learning</b>		<b>Study Abroad</b>	

# 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



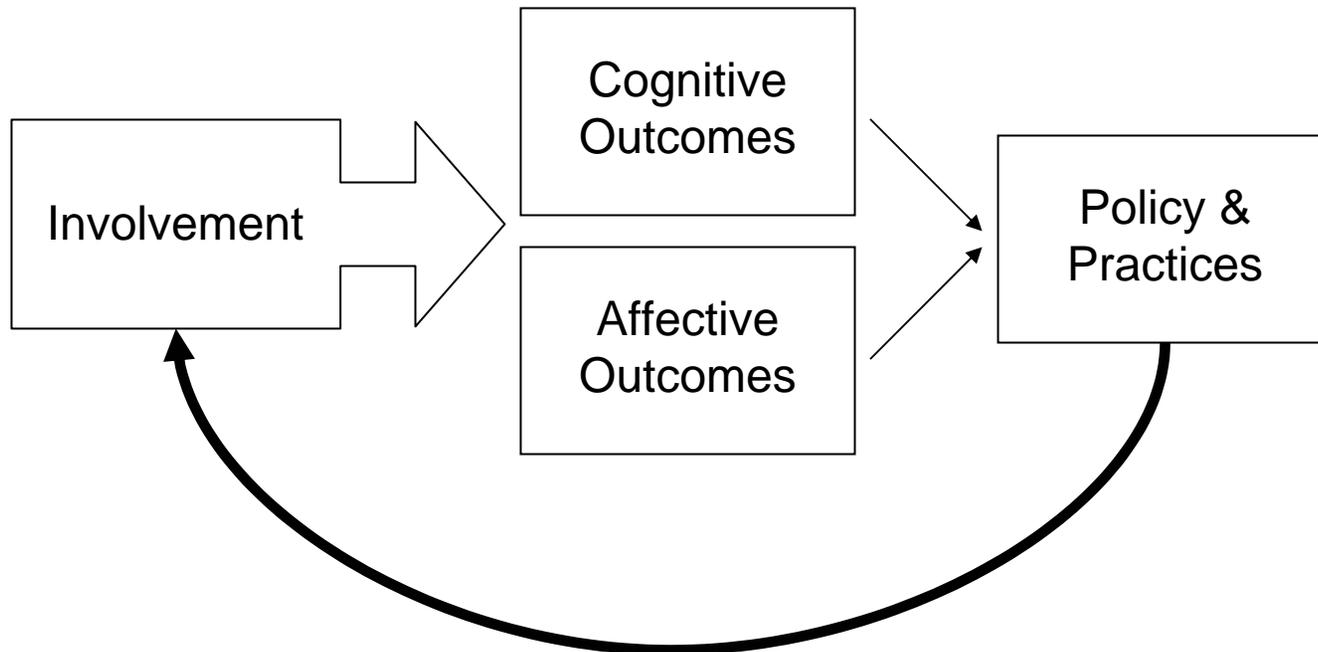
- What is Astin's Student Involvement Theory?

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



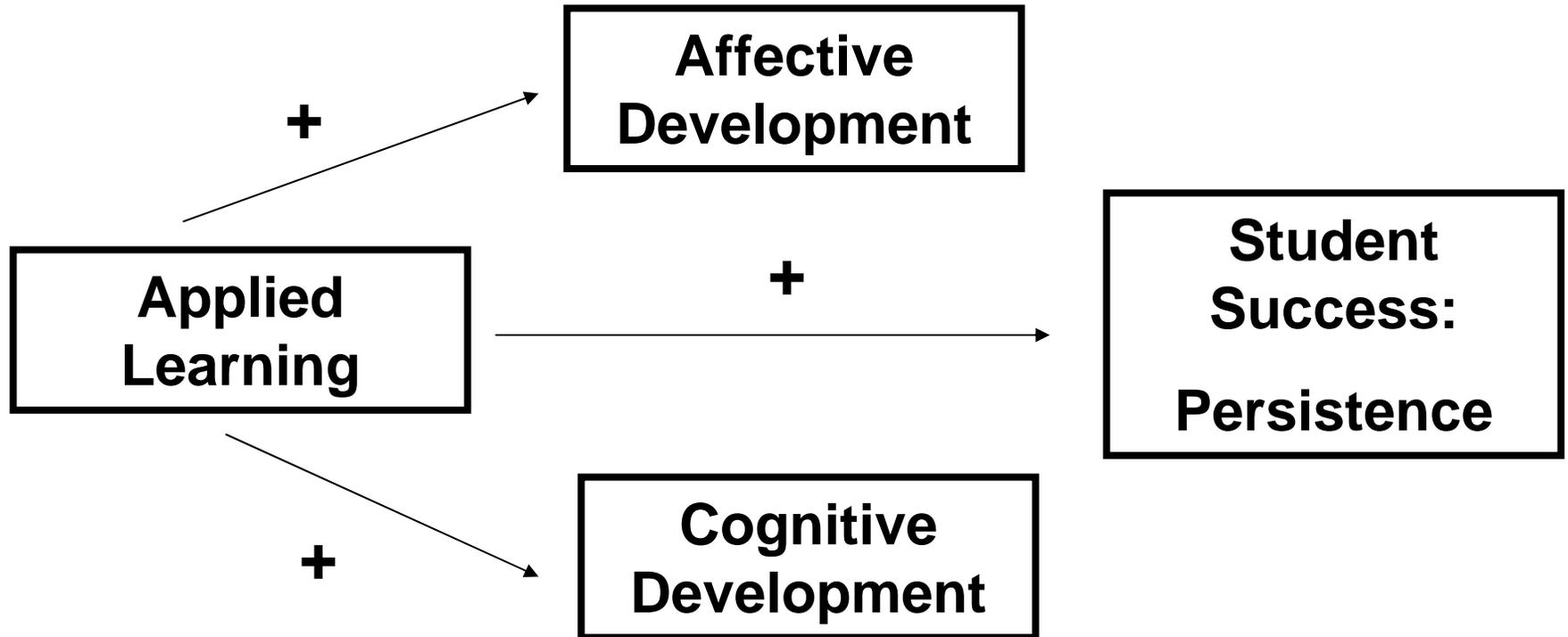
## Postulates and Assumptions



# Theoretical Model



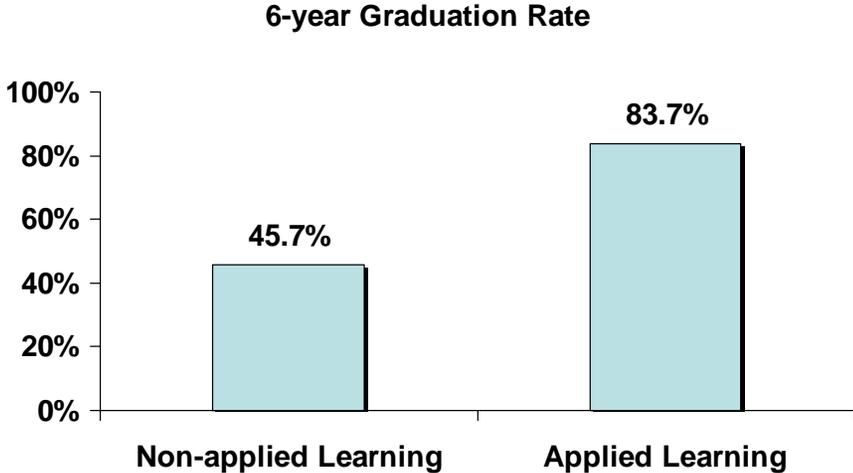
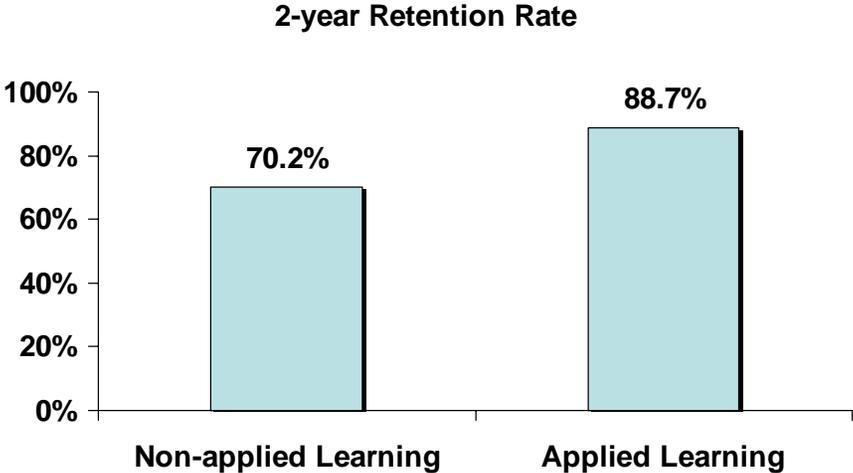
Applied Learning, Development & Student Success



# 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 ( $\geq 25$  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?**