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# Designing Research on Service Learning

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Symposium on Service-  
Learning**

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**Robert G. Bringle, Director,  
IUPUI Center for Service and  
Learning  
Professor of Psychology and  
Philanthropic Studies  
[rbringle@iupui.edu](mailto:rbringle@iupui.edu)**

**Kathryn S. Steinberg  
Academic Assessment  
Specialist  
[ksteinbe@iupui.edu](mailto:ksteinbe@iupui.edu)**

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***What outcome from your  
service learning experience  
are you sure occurs for your  
students?***





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***What evidence do you have  
that this outcome occurs?***


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***What aspect of the course do  
you think produces this  
outcome?***



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***Why do you think that this aspect of the course results in this outcome?***





***Can you identify any construct  
that you think explains why  
the course components  
produce that outcome?***

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***Do you think that these  
components of the course result  
in this outcome equally for all  
students?***

***If not, then for which students  
does it apply and for which does  
it not?***

# Clarifying Terms

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- **Research** – theoretic frame, scientific design, control for causality, robust analysis, validity/reliability, generalizes
- **Program Evaluation** – funder-driven, biased sample, narrow focus on anticipated outcomes, lack of controls for causality, narrow focus on specific program
- **Evaluation Research** – coherence of program design and outcomes, procedures that allow for causal inferences, clear implications beyond the idiosyncratic program that was evaluated



# Types of Research

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- **Correlational:** Activities producing information about what relationship exists between aspects of a class, course, or program
- **Experimental Research:** Activities producing information about why a specific outcome occurred



# Service Learning Student Outcomes (potential DVs)

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- **Academic**

- Learning
- Cognitive processes
- Critical thinking
- Persistence and retention
- Achievement and aspirations
- Integration

- **Life Skills**

- Racial tolerance
- Cultural understanding
- Self-efficacy
- Problem solving
- Career clarification
- Leadership



# Service Learning Student Outcomes

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## Civic and Social Responsibility

- Commitment to community
- Aspirations to volunteer
- Empathy
- Philanthropy
- Civic-minded professional

## Personal Development

- Moral development
- Self-concept
- Motives, attitudes, and values
- Personal development



# Character Strengths and Virtues

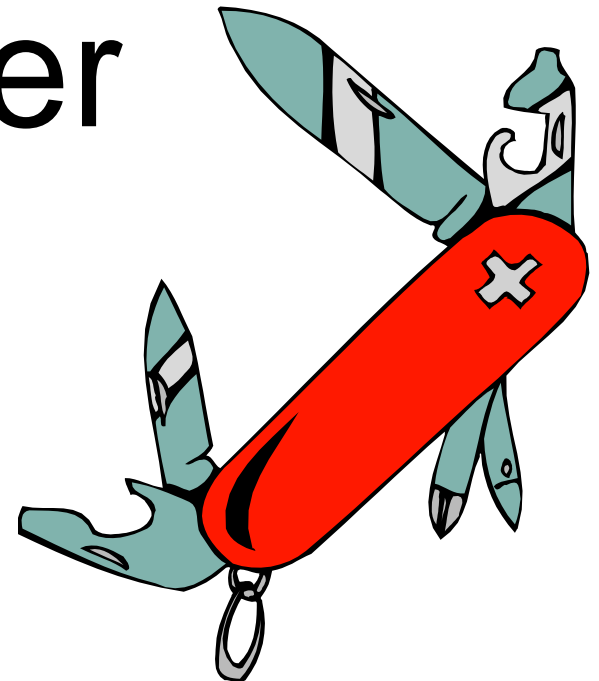
(Petersen & Seligman)

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- **Wisdom and knowledge**--creativity, curiosity, open-mindedness, love of learning and perspective.
- **Courage**--Bravery, persistence, integrity and vitality.
- **Humanity**--Love, kindness and social intelligence.
- **Justice**--Citizenship, fairness and leadership.
- **Temperance**--Forgiveness, humility, prudence and self-regulation.
- **Transcendence**--Appreciation of beauty and excellence, gratitude, hope, humor and spirituality.

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Service learning is  
the Swiss Army  
knife of higher  
education!!





# Unanswered Questions in Service Learning Research

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- Does service learning enhance the learning of course content? If so, how?
- What are the learning and skill outcomes that we can expect from service learning?
- What processes are most effective for service learning?
- How does service learning change institutions of higher education?



# Unanswered Questions (continued)

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- What institutional practices are most conducive to successful service learning?
- What types of community partnerships are most effective for service learning?
- What impact does service learning have on communities?
- What impact does service learning have on the civic-mindedness and actions of students after college?



# What Do We Know?

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For the most part, we know that service learning (variously defined) is ***associated*** with many outcomes that are based on

- the testimony of students,
- come from small sample studies (e.g., single SL class),
- do not control for self-selection,
- occasionally have appropriate comparisons
- do not have multiple indicators or methods,
- have serious limitations on generalizability,
- and, are based on a single experience and measured at the end of the semester.





# Research Limitations

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- Lack of common definition for service-learning and related research
- Variation in programmatic practices and purposes
- Studies conducted as self-studies by advocates of service-learning
- Studies mostly commissioned by funders with narrow, specific questions



# More Research Limitations

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- Few experimental studies
- Limited number of longitudinal studies
- Small sample sizes
- Many studies based on participant self-report
- Data collection often dictated by reporting requirements and expectations

# Implications

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- Limited generalizability or predictive value of most studies
- Weak causal connections
- Predisposing factors unknown
- Results subject to alternate explanations
- Skeptical reaction from scholars and policymakers
- Limited evidence for building support



# Convincing SL Research

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- Guided by theory
- Clear constructs
- Control for differences among groups
- Multiple indicators
- Multiple methods
- Converging results across different methods
- Confidence in conclusions
- Implications for teaching and learning In general



# Recommendations

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## **IV: Need greater fidelity and specification**

### **DV: Holy Grail**

- 1. Learning: Independently assessed learning that controls for pre-existing differences**
- 2. Retention: Because Univ. presidents care**
- 3. Community Impact: Because we should care**

### **Theory-based research**

- Intergroup Contact Hypothesis**
- Attribution theory**
- Self-determination theory and intrinsic motivation**
- Diversity, stereotypes, and attitude change via  $\Delta$  Behvr  $\rightarrow$   $\Delta$  Attitude**

# Recommendations

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**Recognition of SL as an *in vivo* test bed for theory**

**Issue of creaming vs. understanding the unmotivated**

**Boundary Conditions**

**– The role of moderator variables**

**Longitudinal Research**

**Study SL as an intervention that can affect the relationships between the ABC's**

# Research Issues

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- Implementation of IV
  - Process evaluation
  - Manipulation checks
  - Quality control
- Moderator variables
  - Under what conditions?
  - For what types of students?

# Research Issues (continued)

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- Mediating variables
  - Why did the intervention have a particular effect?
- Dependent variable
  - Sensitivity
  - Specificity
  - Meaningfulness
  - Match with IV



# Use of Mixed Methods

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- Mixed methods are not necessarily better, but they can help when they:
  - Are selected based upon theory and constructs
  - Provide complementary types of information
  - Produce converging results
  - Are all based on multiple indicators

# Use of Multiple Indicators

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- Multiple indicators are superior (quantitative and qualitative) whether focusing on:
  - Items on a scale
  - Time samples
  - Journal entries
  - Courses or campuses
  - Skills
  - Intentions
- **See Bringle, Phillips, & Hudson, 2004 for a collection of scales**