What is Learning in Service-Learning?  
Findings from Service-Learning Research at Beijing Normal University

Meilin Yao, Fangfang Guo  
(School of Psychology, Beijing Normal University, China)

Wenfan Yan  
(College of Education and Human Development, University of Massachusetts Boston, USA)

Cong Wang, Yulan Li  
(School of Psychology, Beijing Normal University, China)
Introduction to the SL program in BNU
Why do service-learning research?

• Poor problem solving transfer from classroom to authentic situation
  – High scores but low abilities
• Separation of academic development and social responsibility
• Few studies on how to utilize the pedagogy of service-learning into regular academic curriculum in Mainland China
• Few studies on the mechanisms of service-learning affecting students’ outcome
Pilot study

- 844 college students and 6203 middle and high school students were investigated

Results
- They had more or less service experience

Samples of college students
- How many hours do you spend in service activities?
  - 21.8% 40h./year
  - 44.9% 10h./year
- What kinds of service activities do you participate?
  - 63.30% temporal
  - 5.70% continuous/sustainable
the quality of service experience

• Most service activities were temporal
• The time spent on service was very short
• Service activities had no relationship with school learning
• There was no challenge for students during service activities
• Students had no autonomy in service activities
Service-Learning program in BNU

- **2 hour classroom learning** *(Psychology of Learning)*
- **2 hour service activity at weekend**
- **To interact with special children (the mentally retarded, autism)** in groups
- **Lasted for a semester**

**Flowchart:**

1. **Professor** → **Graduate students**
2. **Graduate students** → **undergraduate students**
3. **undergraduate students** → **2 hour classroom learning** *(Psychology of Learning)*
4. **2 hour classroom learning** → **Service for special children**
5. **Service for special children** → **Group discussion**
6. **Group discussion** → **Reflection**
7. **Reflection** → **Focus group interview & celebration**

**Description:**

- **Learning In class**
  - **Service for special children**
  - **Group discussion**
  - **Reflection**
  - **Focus group interview & celebration**
我們做過的活動

- 算算術
- 画画
- 拼圖
- 拍球
- 搪橡皮泥
- 跳兔子舞
Samples of our studies
Goals

• To examine whether service-learning experience may enhance college students’ academic expertise;
• To understand the role of service-learning experience plays in the development of civic responsibility;
• To explore the moderating or mediating effects that service-learning influences students outcomes
Research method

• mixed method
• Data collected
  – self-report surveys
  – interactive video
  – group discussion
  – focus group interview
  – reflection journals
  – feedbacks from parents of special children
Service-Learning

Moderating Factors

Outcomes

Mediating Factors

Service-Learning

Outcomes
Subjective task value

Study 1

Engagement

Emotional engagement

Cognitive & behavioral engagement
• Participants: 57 college students
• Tools: self-report questionnaire
• Engagement Scale
  • Skinner et al. (2008)
  • Pintrich et al. (1991): MSLQ (Motivated Strategies for Learning Questionnaire)
• The subjective task value Scale
  • 6 items from the MSLQ
• 7-point Likert scale: 1=“strongly disagree”, 7= “strongly agree”
<table>
<thead>
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Note: *P<0.05, **P<0.01
Subjective task value influenced engagement

Emotional engagement fully mediated the effects of task value on cognitive and behavior engagement

The relationship between task value and engagement

*P<0.05, N=57
Study 2

• To explore the dynamic process of students engagement during the service-learning activities

• **Participants**

• 31 sophomores (18 females and 13 males, 18-22 years old)

• 279 reflection journals were collected and analyzed following the coding rubric for engagement
The developmental characteristics of engagement

- 4 developmental stages:
  - a) confusion and hesitancy,
  - b) enlightenment and enthusiasm,
  - c) fluctuation and adjustment; and
  - d) stabilization and routinization
Study 3

• To explore the effect of service-learning on problem solving transfer

• Participants:
  – Service learning group: N=63
  – Traditional group: N=48

• Data collected
  – Case analysis on how to use reinforcement effectively
  – Essay on praise application in education
  – Coding rubric
## Comparison of students’ learning transfer between traditional teaching group and service-learning group

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<th>Service-learning (N=63)</th>
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Study 4

• To explore the effects of service-learning on attitude toward special children

• Participants:
  – 47 college students who had interacted with special children for a semester

• Data collected
  – Mental Retardation Attitude Inventory (MRAI-R, Antonak & Harth, 1994): pre- and post-test
  – Case analysis on inclusion of special children in Mainland China
Case:
Should special children be included in normal school and not receive the education tailored for them?

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<td><strong>N=47</strong></td>
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<td>Acceptance</td>
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- Understanding disabilities
- Showing empathy
- Recognizing individual uniqueness
- Being realistic
- Appreciating what they have and their abilities
What is learning in service-learning?

Learning the Course Content
- ABA (Applied Behavior Analysis)
- Reinforcement
- Classical conditioning
- Child development
- Learning theories

Learning about Service
- Interacting with special children
- Teaching math, motor skills, et al.
- Engagement
- Subjective task value

Learning about the Social Issue
- Realistic and positive attitude to special children
- Understanding diversity

Adaptive expertise
- Civic responsibility