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

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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

- **Professor**
- **Graduate students**
- **undergraduate students**

- **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**

**Steps of the program**

1. **Learning In class**
2. **Service for special children**
3. **Group discussion**
4. **Reflection**
5. **Focus group interview & celebration**
我們做過的活動

- 算算術
- 画画
- 拼圖
- 拍球
- 捏橡皮泥
- 跳兔子舞
第44页
我们两个组合合照~~幸福的陌生人~~

玩沙子好开心啊~
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
Study 1

Subjective task value → Emotional engagement → Cognitive & behavioral engagement

Subjective task value → 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>
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<th>3</th>
<th>4</th>
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<td>2. emotional engagement</td>
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<td>3. cognitive engagement</td>
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<td>4. behavioral engagement</td>
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Note: *P<0.05, **P<0.01
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
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<td>(M) (SD) (M) (SD)</td>
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<td>Near</td>
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<td>Fluency</td>
<td>2.46 (1.17)</td>
<td>1.89 (1.21)</td>
<td>2.50*</td>
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<td>Accuracy</td>
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<td>3.08 (1.24)</td>
<td>-3.13**</td>
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<td>Depth</td>
<td>2.46 (1.44)</td>
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<td>Total</td>
<td>2.40 (0.76)</td>
<td>2.66 (0.69)</td>
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<td>Far</td>
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<tr>
<td>Fluency</td>
<td>2.25 (1.06)</td>
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<td>Adequacy</td>
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<tr>
<td>Depth</td>
<td>2.29 (1.43)</td>
<td>3.02 (1.24)</td>
<td>-2.86**</td>
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conceptualization

| Total      | 2.27 \(0.88\)          | 2.47 \(0.84\)              | -1.20 |
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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<tr>
<td>n</td>
<td>%</td>
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<td>29.79</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