MEASURING LEARNING OUTCOMES OF STUDENTS IN SERVICE-LEARNING CONSIDERING DIVERSITY AND DEGREE OF EXPERIENCES

Enrique G. Oracion
Director, Research and Development Center

Emervencia L. Ligutom
Director, Institute of Service-Learning

Silliman University
Dumaguete City, Philippines
Introduction

• Topic
how learning outcomes be measured so students could be justly afforded the grades they need for academic promotion

• Methods
1. review of related literature and reports
2. interview of service-learning faculty of Silliman University
Modes of service-learning outcome

Note on impact and grading

• students not given grades corresponding to the impacts or the degree of help and improvement they have extended

• impact is based on the program of the school, as a whole, of bringing students to serve and work with certain communities
On four modes of service-learning outcomes

technical, cultural, political and anti-foundational

Issues in measuring service-learning outcomes

1. to capture ideal and behavioral learning outcomes
2. to provide corresponding ratings which the students deserved
• **Technical** - expected of students to acquire and demonstrate, embedded in the syllabus

• **Cultural** - provide “meanings to students their service-learning engagement”, promoted sense of engaged citizenship

• **Political** - ability in promoting and empowering historically disempowered and non-dominant groups

• **Anti-foundational** - questioning and opposing the knowledge, skills and dispositions
Variable engagement: Impacts of service-learning on students

• Community involvement of students: optional or compulsory

• Ways for delivering services:
  1. specialists rendered services specific to the disciplinary training of students
  2. generalists engaged in services that responded to the needs of the community
Different nature of the services rendered results to variable experiences and learning outcomes

1. specialists- more focused learning outcomes linked to their discipline
2. generalists- may have broader and even unintended learning outcomes beyond the expectations of their discipline
Example of technical learning outcome: Community assessment and sharing of results to government leaders.
Variables and indicators

On Silliman University pilot project

• 2001 initial service-learning was an interdisciplinary community-based service-learning

• Disciplines involved: sociology and anthropology, social work, nursing, education, medical technology, physical therapy and business administration.
Evaluation done after the school year

1. 92 students were asked to rate
2. how community engagement influenced their thoughts, attitudes and behaviors
3. rated high in classroom skills and knowledge, the value of the services they had rendered to the community and how much they learned in the process
On UBCHEA initiative and support

• 2006- Dr. Betty Cernol-McCann introduced more specific but several variables and indicators to systematize the evaluation of service-learning program on students

• 2006 and 2007- Dr. Oracion used to measure the impact of intercultural service-learning program organized by the Service-Learning Area Network (SLAN)
• Students rated significantly higher after service-learning engagement in the following:
  1. involvement in community social-economic activities
  2. contribution of new ideas and activities
  3. commitment to community service
  4. personal and academic learning
  5. cultural learning; things not taught in school
  7. personal goals and social roles
  8. value of chosen college careers
  9. preparation for future careers
  10. understanding locals and to relate well with others
Inputs to measuring learning outcomes

1. typology of learning outcomes of Dan Butin (2011) and the variables and indicators of service-learning impact introduced by Betty Cernol-McCann (2006) can be linked

2. useful in identifying the strategies of measuring the variables and indicators of learning outcomes for purposes of giving grades (refer to next table)
## Variables, indicators and learning types measured

<table>
<thead>
<tr>
<th>Variables</th>
<th>Indicators</th>
<th>Learning Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career choices</td>
<td>Influence of community placement on career values and opportunities</td>
<td>Technical</td>
</tr>
<tr>
<td>Personal development</td>
<td>Participation in additional courses and other extracurricular activities</td>
<td>Technical</td>
</tr>
<tr>
<td>Academic achievement</td>
<td>Role of community experience in understanding and applying academic content</td>
<td>Technical</td>
</tr>
<tr>
<td>Self-awareness</td>
<td>Changes in awareness of strengths, limits, direction, roles and goals</td>
<td>Technical</td>
</tr>
<tr>
<td>Commitment in service</td>
<td>Plans for future service influenced by current community exposure</td>
<td>Technical, Cultural</td>
</tr>
<tr>
<td>Awareness of community</td>
<td>Knowledge of community history, strengths, problems, definitions</td>
<td>Cultural</td>
</tr>
<tr>
<td>Involvement with community</td>
<td>Quantity and quality of interactions, attitude toward involvement</td>
<td>Cultural</td>
</tr>
<tr>
<td>Sensitivity to diversity</td>
<td>Attitude, understanding of diversity, comfort and confidence in the company of different people</td>
<td>Cultural</td>
</tr>
<tr>
<td>Communication</td>
<td>Quality of interaction with co-learners and the community being served</td>
<td>Cultural</td>
</tr>
<tr>
<td>Sense of ownership</td>
<td>Learner's role in contributing new ideas and activities during community engagement</td>
<td>Political</td>
</tr>
<tr>
<td>Autonomy and independence</td>
<td>Learner’s ability to act and to learn by oneself in various settings</td>
<td>Anti-foundational</td>
</tr>
</tbody>
</table>
3. depending upon the objectives of the course, the grades given to students are primarily based on the knowledge and skills the students are expected to acquire.

4. learning expectations and grading procedure are shared to students before service-learning engagement.

Example: 2012 Cross-Border Service-Learning Summer Institute handled by the Office of Service-Learning (OSL) of Lingnan University.
## Evaluation bases of OSL and evidences needed

<table>
<thead>
<tr>
<th>Evaluation Bases or Strategies</th>
<th>Percent</th>
<th>Evidences Needed for Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research proposal</td>
<td>25</td>
<td>Written proposal for what to implement</td>
</tr>
<tr>
<td>Report presentation</td>
<td>20</td>
<td>Post-community engagement oral presentation</td>
</tr>
<tr>
<td>Reflective essay</td>
<td>15</td>
<td>Narrative about the meanings of the experience</td>
</tr>
<tr>
<td>General participation</td>
<td>15</td>
<td>Behavior demonstrated in group activities</td>
</tr>
<tr>
<td>Service practicum</td>
<td>10</td>
<td>Efforts exerted in doing service</td>
</tr>
<tr>
<td>Group discussion</td>
<td>10</td>
<td>Quality of ideas shared during discussion</td>
</tr>
<tr>
<td>Reflective journal</td>
<td>5</td>
<td>Compilation of experiences with insights</td>
</tr>
</tbody>
</table>
The experience of Silliman

• currently, social and health sciences dominated service-learning at Silliman University

• reflects that it easily or naturally finds a home among academic units that directly relate or manage human affairs and conditions

• social work, psychology, sociology-anthropology, public affairs and governance, nursing, medical technology, physical therapy and nutrition and dietetics
Categories of service activities

1. research activities
   e.g. socioeconomic survey, needs assessment
2. capability-building activities
   e.g. seminars, trainings, lectures
3. needs-specific activities
   e.g. tutorials, health services, laboratory tests
Rank of learning outcomes expected

1. technical (1.55)- related with the courses or degrees enrolled, particularly in the health sciences
2. cultural learning (2.00)- noted more in social sciences or service-oriented courses
3. political (2.73)- not all expected this
4. anti-foundational (2.86)- not all expected this; circumstantial
Comparison of strategies or bases for measuring learning per outcome by number of teachers reporting (n=10)

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Technical</th>
<th>Cultural</th>
<th>Political</th>
<th>Anti-foundational</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects *</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>36</td>
</tr>
<tr>
<td>Reflection paper</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>8</td>
<td>34</td>
</tr>
<tr>
<td>Reflection discussion</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Behavior change</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Examinations</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>14</td>
</tr>
</tbody>
</table>

*Projects: a. photo and narrative documentation, b. report of activities implemented, c. journals of field experiences, d. project output presentation to the community
Percent of grades

• Percent of service-learning outputs to the total grade of students = 38% (mean)

• Percent of grade given to particular learning outcomes to the total percent of service-learning grade:
  1. technical (11.92%)
  2. cultural (9.87%)
  3. political (8.33%)
  4. anti-foundational (8.10%)
Processing of learning or reflection sessions
Lessons: what and how to measure learning outcomes

1. must be clear what learning outcomes are expected: technical, cultural, political, and anti-foundational

2. indicators or evidences of every learning outcome have to be identified which students should know before community service

3. the weights of expected learning outcomes have to be clear to students
4. percent of service-learning grade to total grade have also to be clear to students
5. no uniform grading system can be expected due to the diverse nature of the disciplines; no best way as long as it is systematic
6. course requirements are variable relative to required learning competencies
7. grades are measurement of the learning that students evidently demonstrated; not about the quality or impact of services they rendered
THANK YOU