

# A Pilot Study Common Outcome Measurement of Service-Learning in Hong Kong

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# Background



- Lingnan University
  - The only liberal arts university in Hong Kong
  - Motto: “**Education for Service**”
    - Community services as part of students’ university life, e.g, Integrated Learning Programmes (ILPs)
  - Scholastic excellence & whole-person development
  - **S-L Pioneer** in Hong Kong
  - Distinctive teaching, learning processes and environment through liberal arts education and S-L:

## 6 pillars:

(Service-Learning, teaching mode, international exchange, campus life, interdisciplinary curriculum, community services)

## 4 Is:

(Individualization of students; Interdisciplinary approach; Intra-curricular activities; International exchange)

## 3 Es:

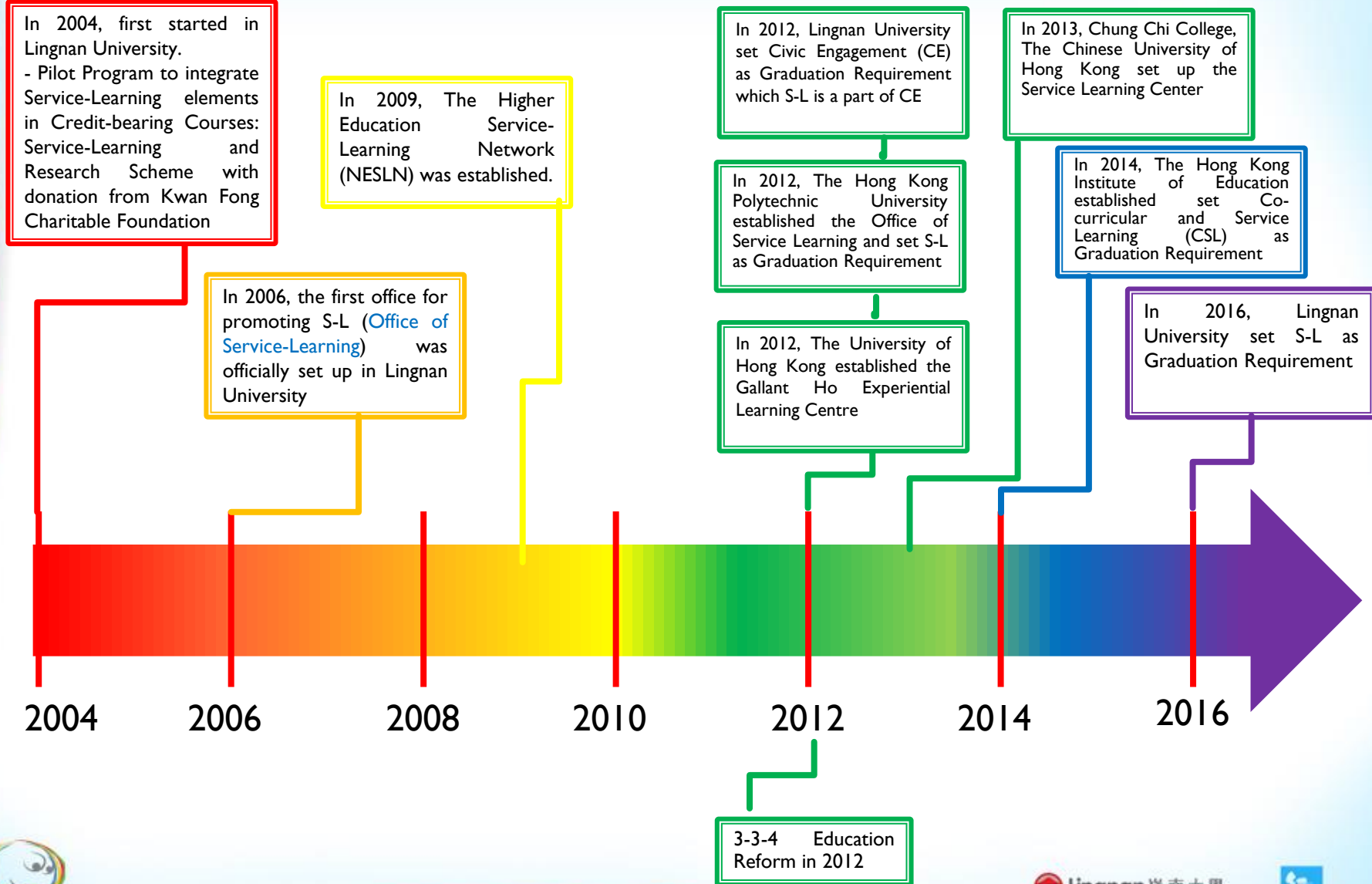
(Experience, Exposure, Excitement)

# S-L models: Similarities & Differences

	LU	PolyU	HKIEd	UST	BU	HKU	CU	CityU
S-L related to Academic	Y	Y	Y	Y	Y	N	N	N
	S-L is integrated in credit-bearing courses					Community Service		
S-L as graduation requirement (Fully, Partly, No)	P	F	F	N	P	N	N	N
	S-L as graduation Requirement					Voluntary		
Service Location (L: Local, I: International & M: Mainland)	L/I/M	L/I/M	L/I/M	L/I/M	L/I/M	L/I/M	L/I/M	L/I/M
	Both Local, Mainland and International S-L programs							
Target	UG	UG	UG	UG	UG	UG	UG	UG
	For Undergraduate Students							
S-L has positive impact on student's development	Y	Y	Y	Y	Y	Y	Y	Y
	S-L has positive impact on student's development							



# S-L development in Hong Kong



# S-L development in Hong Kong

## Higher Education Service-Learning Network in Hong Kong (HESLN)

-HESLN was first established in 2007

-Membership: 10 Higher Education Institutions (Lingnan University, The University of Hong Kong, The Chinese University of Hong Kong, Hong Kong University of Social Science and Technology, City University of Hong Kong, The Hong Kong Polytechnic University, Hong Kong Baptist University and the Hong Kong Institute of Education, Hong Kong Shue Yan University and Hong Kong College of Technology)

-Objectives: to provide a platform for experience sharing, ideas exchange of Service-Learning practices and exploring the possibilities of the joint-research & joint-program among Higher Education Institutions in Hong Kong

### Development of the Common Outcome Measurement

-2 pilots in 2011 and 2012

-9 Learning outcome domains

(Self-Understanding/Confidence, Communication Skills, Problem-solving Skills, Civic Engagement, Social Responsibility and Willingness to contribute, team Skills, Self-reflection, General Knowledge Application, Caring for Others and Intercultural Competences.)

### Proposed Join-U activities

Organizing the Service-Learning's forums and academic seminars

Creating the Joint-U E-Resources platform on Service-Learning

Co-operating the first journal focused on Service-Learning in Asia

Organize an Asia Pacific Regional forum on Service-Learning

# Why develop COM in HK

The **need** for a common outcome measurement in HK

- Service-Learning as a new pedagogy which becomes more and more popular in Hong Kong
- Different institutions of higher education in Hong Kong have their own belief and measurement
- The comparison of effectiveness and learning among institutions become difficult and costly (Kramer, Parkhurst, & Vaidyanathan, 2009)
- Shared measurement system is the important condition for successful service-learning programs (Kania & Kramer, 2011)
- Lack of common measurement in HK



# Objectives

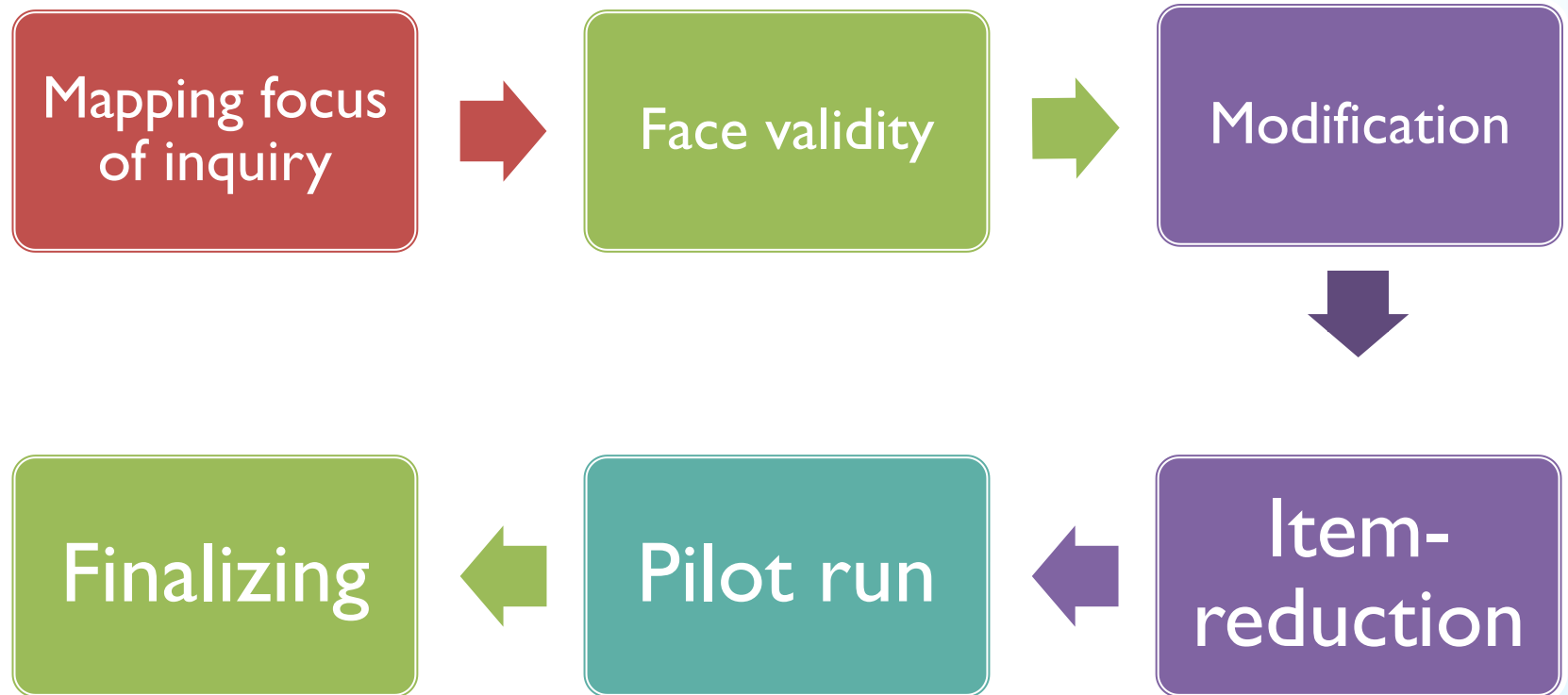
- To develop a comprehensive and territory-wide survey instrument for S-L





# Research Workflow

“Bottom-up” approach



# Generic skills comparison on Service-Learning Evaluation Questionnaires

Items	HKled	HKU	LU	PolyU
1. Self-exploration	✓		✓	✓
2. Inter-personal skills	✓	✓	✓	✓
3. Communication skills	✓	✓	✓	✓
4. Problem-solving skills	✓	✓	✓	✓
5. Analyzing skills	✓	✓	✓	✓
6. Presentation skills	✓		✓	
7. Civic engagement	✓	✓	✓	✓
8. Self confidence / Self development	✓	✓	✓	
9. Creativity			✓	✓
10. Collaboration skills	✓	✓	✓	✓
11. Self reflection	✓		✓	
12. Emotion control	✓		✓	✓
13. Inter-cultural skills	✓	✓	✓	✓
14. Time management	✓		✓	
15. Subject related knowledge		✓	✓	✓



# Mapping focus of inquiry



# Generating the set of potential questionnaire items by face validity

- We generate the set of scale items that are potential for being adopted in the COM questionnaire.
- We go through the procedure of referencing each item in the set. Some modifications are made according to the specifications of this survey.
- If no reference underlying any particular item that is indispensable is found, the item will be constructed according to our own theorizing.
- Through the **panel discussion** of several Joint-U meetings, we have made face validity for the questionnaire items.

# Carrying out item-reduction development

- **Two principles:**
  1. Retain items that entail logical relevance to the cognition-attitude-behavior model and weed out those not;
  2. Keep the number of items “minimal” by only retaining the most relevant ones to the 8 domains of study (for the practical concern of students’ ease to complete the survey).

# Outcome Indicators of Service-Learning Programs

**Self-understanding/  
Confidence and Self  
Reflection**

**Communication  
Skills and Team  
Skills**

**Problem-solving  
Skills and General  
Knowledge  
Application**

**Civic Engagement,  
Social  
Responsibility and  
Willingness to  
Contribute**

**Caring for Others**

# Self-understanding/ Confidence and Self Reflection

- Increased self-confidence and self-esteem that result from responsible, ethical, independent action. Goleman (1995)
- To facilitate students to be self-aware and reflective Albert (2005).
- Reflection “facilitates the student's making connections between their service and their learning experience.
- Can introduce and reinforce students’ knowledge and critical thinking skills.” (Eyler and Giles 1999)



# Communication Skills and Team Skills

- Develop communication skills and train students up to be a team player, which are necessary for their future career development (Miller and Gonzalez 2009; Eylwe, Giles, Stenson & Gray 2001).
- Tucker et al. (1998) argued that students' communicating skills can be enhanced by a service-learning program as the nature of the program itself utilizes communication skills: students joining the program will inevitably learn how to communicate with other departments, organizations and students.



# Problem-solving Skills and General Knowledge Application I

- Enhance thinking skills and knowledge application necessary for success outside academia.
- Comprehensive projects and analytic journals, require demonstration of critical thinking and problem solving skills in multiple contexts.
- Right balance of challenge and support to foster intellectual growth and development. (Eyler and Giles 1999)

# Problem-solving Skills and General Knowledge

## Application II

- Bring curriculum to life and to link authentic applications of schoolwork with the needs of the community.
- Engage students in action and reflection on important community, social, political, and environmental issues.
- Provides service-learning experiences marked by continuity, depth, and meaningful participation that are embedded in the curriculum and culture of the school and institutionalized as a core instructional strategy. Berman (2004),

Berman, S.H. 2004. "Teaching civics: a call to action," *Principal Leadership* 5(1): 16-20.

# Civic Engagement, Social Responsibility and Willingness to Contribute I

- Learning occurs best when student's education is linked to social responsibility. (McDonald and Kromer 2005)
- Reich's study in the U.S. (2005) found that while community service among young is on the rise, political interest and involvement is on the decline.

•McDonald, J., and Kromer, T. 2005. "Service-learning: a way to connect science to the community," *Science Scope* 28(7): 46-48.

•Reich, R. 2005. "Service-learning and multiple models of engaged citizenship," *Journal of Education* 186(1): 23-27.

# Civic Engagement, Social Responsibility and Willingness to Contribute II

- Service-learning projects should be geared directly to increasing civic involvement and political engagement (Agard 2004)
- The civil responsibility survey has made them especially conscious of the vast differences in definitions of and goals for impacting students' civic responsibility or engagement. (Furco, 1998)

•Agard, K.A. 2004. "Learning to give," *Principal Leadership* 5(1): 43-46.

•Furco, A., Muller, P., & Ammon, M.S.. 1998. *Civic Responsibility Survey for K-12 Students Engaged in Service-Learning*. Berkeley, CA: Service-Learning Research and Development Center, University of California, Berkeley.

# Caring for Others

- A sense of interconnectedness with others and their environment, learn to open their hearts to others, and become more empathetic through self and group reflection. (Louie-Badua and Wolf 2008)

Louie-Badua, L.J., and Wolf, M. 2008. "The spiritual nature of service-learning" *New Directions for Youth Development* 118: 91-95.

# Pilot study I

- Conducted in May 2011
- 189 students from 5 local universities, including
  - 31 from Lingnan University
  - 35 from Hong Kong Polytechnic University
  - 44 from The HKUST
  - 24 from Hong Kong ShueYan University
  - 55 from Hong Kong Institute of Education
- A self-administered questionnaire after the program
- Based on face validity and reduce the proposed questions to 78 items
- 10 points Likert(1=least agreed 10=most agreed)
- Add the domains “intercultural competences” from 8 domains

# Results

- Reliability by domain is good too
  - $\alpha$  range from .76 to .95

# Reliabilities by Domain

## Self-understanding/ Confidence

- 7 items
- $\alpha=.89$

## Communication Skills

- 7 items
- $\alpha=.75$

## Problem-solving skills

- 5 items
- $\alpha=.88$

## Civic Engagement, Social Responsibility and Willingness to Contribute

- 18 items
- $\alpha=.92$

## Team Skills

- 19 items
- $\alpha=.95$

## Self-reflection

- 6 items
- $\alpha=.84$

## General Knowledge Application

- 4 items
- $\alpha=.85$

## Caring for Others

- 6  $\rightarrow$  5 items
- $\alpha=.76$

## Intercultural Competences

- 6 items
- $\alpha=.76$



# Pilot study 2

- Conducted from September 2011 to July 2012
- Refined to 36-item version (4 items for each of the 9 domains)
  - 1) item-total correlation
  - 2) reliability if the item is removed
  - 3) degree of relation to the domain topic
- 193 valid sample pairs from 5 universities
  - 44 from Lingnan University
  - 21 from The City University of Hong Kong
  - 40 from The HKUST
  - 23 from Hong Kong Shue Yan University
  - 65 from The HKIED
- 2<sup>nd</sup> round of data collection with a pre- and post-test design

# Results

- Reliability of overall scale is high
  - Pre-test  $\alpha=.96$ ;
  - Post-test  $\alpha=.95$
- Reliability by domain is good too
  - $\alpha$  range from .67 to .86, except Intercultural Competence

# Reliabilities by Domain

## Self-understanding/ Confidence

- Pre:  $\alpha=.82$
- Post:  $\alpha=.82$

## Communication Skills

- Pre:  $\alpha=.86$
- Post:  $\alpha=.86$

## Problem-solving skills

- Pre:  $\alpha=.80$
- Post:  $\alpha=.82$

## Civic Engagement, Social Responsibility and Willingness to Contribute

- Pre:  $\alpha=.87$
- Post:  $\alpha=.85$

## Team Skills

- Pre:  $\alpha=.83$
- Post:  $\alpha=.83$

## Self-reflection

- Pre:  $\alpha=.80$
- Post:  $\alpha=.82$

## General Knowledge Application

- Pre:  $\alpha=.77$
- Post:  $\alpha=.84$

## Caring for Others

- Pre:  $\alpha=.75$
- Post:  $\alpha=.67$

## Intercultural Competences

- Pre:  $\alpha=.62 \rightarrow .68$
- Post:  $\alpha=.49 \rightarrow .80$

# Paired Sample t-test by Domain

Domains	Mean		Difference (%)	Sig. (2-tailed)
	Pre-test	Post-test		
1. Self-Understanding/Confidence	7.43	7.85	5.54%	.000
2. Communication Skills	7.40	7.81	5.58%	.000
3. Problem-solving Skills	7.37	7.71	4.66%	.000
4. Civic Engagement, Social Responsibility and Willingness to Contribute	7.72	8.06	4.39%	.000
5. Team Skills	7.59	7.92	4.41%	.000
6. Self Reflection	7.73	7.96	2.98%	.003
7. General Knowledge Application	7.64	7.87	3.03%	.001
8. Caring for Others	7.97	8.21	2.97%	.001
9. Intercultural Competence	7.71	8.02	4.01%	.004

# Revised model for COM



# Limitations

- Need to have qualitative data to triangulate the quantitative data and further understand the factors influencing students' learning outcomes
- Relative small sample: Need to have large sample to validate the scale



# Conclusion

- Common outcome measurement is needed and useful for the development of S-L in Hong Kong
- Further study is need to support the development of the Common outcome measurement



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**Q & A**

**Thank You**

