




Digital Classroom Project: Service-Learning and Information and Communication Technology's impacts on student learning in Hong Kong


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Agenda


- Background
- Definitions of Knowledge Exchange (KE), Service-Learning(S-L) and Information and Communication Technology (ICT)
- Project Objectives and Structure
- Research & Evaluation Method
- Impact on student learning
- Conclusion



Background


- Lingnan University's motto: Education for Service → Service-Learning → KE process
 - **University:** Not only the place for intellectual development, but also other competences and values → the Adaptability, Brain Power, Creativity
 - **Community:** One of the platforms to conduct S-L and achieve KE
- Digital Classroom Project-using an online e-learning platform for students to exchange ideas on selected books
 - **Stakeholders:** Local Service-Learning program between Office of Service-Learning & Department of Sociology and Social Policy, Lingnan University & S. R. B. C. E. P. S. A Lee Yat Ngok Memorial Primary School
 - University students exchange ideas on the selected books with primary school students through an online e-learning platform and interactive reading related activities.
 - With the element of Knowledge Exchange (KE), Service-Learning(S-L) and Information Communication Technology (ICT)
 - Since 2007

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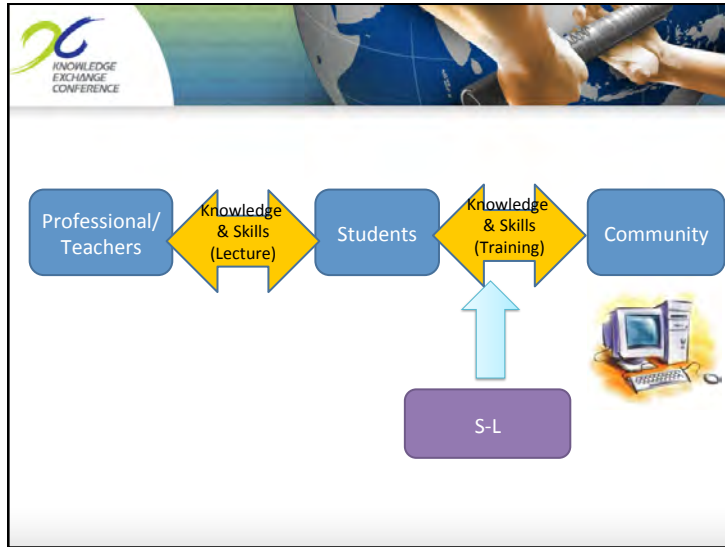


Definitions

- **Knowledge Exchange(KE)** is a two-way process where individuals or organizations share learning, ideas and experiences
- **Service-Learning (S-L)** refers to a pedagogy (teaching method) that combines academic study with community service-An Experiential Learning process



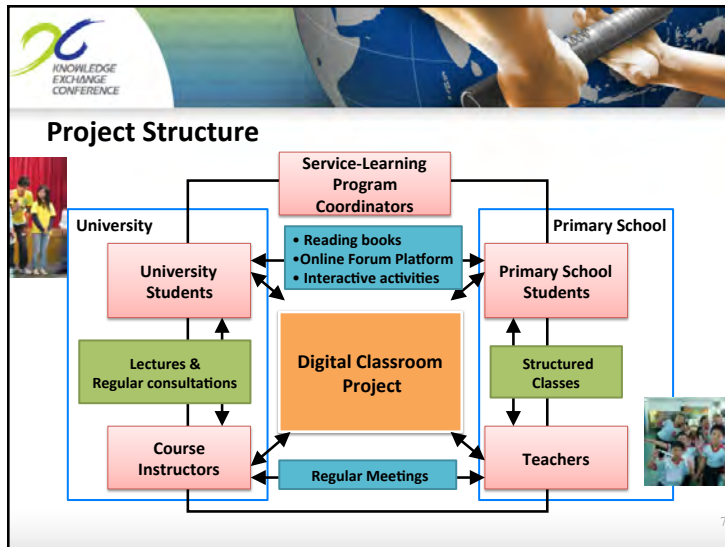
Academic Study + Community Service + Reflection = Service-Learning
- **Information and Communication Technology (ICT)** stresses the role of unified communications and the integration of telecommunications, computers, which enable users to create, access, store, transmit, and manipulate information



Project Objectives

- 1) foster students' reading ability & reading incentives;
- 2) cultivate the reading culture and atmosphere;
- 3) enhance students' independent learning ability & study skills;
- 4) facilitate technological development & enhancement in education;
- 5) enhance learning & teaching efficacy;
- 6) develop intergenerational relationship

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Participant	University Students		Primary School Students		
	No. of participants				
2007	4		35	-	-
2008	8		33	38	-
2009	12		25	35	38
School Year & Course	Year 2 & Year 3 SOC204 Society and Social Change SOC334 Science, Technology and Society SOC324 Work and Occupation		Primary 4	Primary 5	Primary 6
Duration	One semester (3 months)				
Roles	<ul style="list-style-type: none"> Tutor Companion 		<ul style="list-style-type: none"> Learner/ participant 		
Major tasks	<ul style="list-style-type: none"> Intensive reading (two books with the theme of personal growth and civic values, expect for Primary 4 students) Encouraging primary school students to share their reading experiences Expressing personal opinions Assisting teachers in supervising and facilitating online discussion Arranging and designing four reading activities Applying their soft skills and classroom knowledge into activity design and other assignments 		<ul style="list-style-type: none"> Replying to questions, expressing personal opinions and engaging in discussion on the online forum Participating actively in discussion Completing worksheet and related readings Participating actively in related activities organized by university students 		

Course Name	Course description	Linkage with DCP (the S-L project)
SOC204 Society and Social Change	<ul style="list-style-type: none"> Let students understand one of the most important concerns of time: social change. Introduces the nature of social change and fundamental concepts related to social change 	<ul style="list-style-type: none"> Compare how the primary school was different from what they studied before Especially the class size, school facilities, and teaching method Realize the social change in the education arena
SOC334 Science, Technology and Society	<ul style="list-style-type: none"> Let students examine and reflect on science and technology's impact on the global village economically, politically, socially and environmentally Introduce science and technology and their impacts on contemporary society, especially on international relations, social institutions, social groups and on technology in human civilization. 	<ul style="list-style-type: none"> Through online discussion platform Experience how technology can create impacts on: <ul style="list-style-type: none"> the learning of primary school students the interaction and communication between university and primary school students.
SOC324 Work and Occupation	<ul style="list-style-type: none"> Let students explore some of the issues surrounding the nature of work, work ethics, the impact of technology on work and the organization of work in modern workplaces and societies Enhance students' understanding of the local and global situation. 	<ul style="list-style-type: none"> Act as teachers in the primary school to supervise students on reading and related discussions. Experience the work of teachers, the organization of a primary school, and the impact of technology on teaching.

Research & Evaluation Method

- Quantitative Methods:
 - Pre-test & Post-test questionnaire
- Qualitative Method
 - Focus group interview (University Students, Primary School Students and Teachers)

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Research & Objectives

Objectives	Domains
<ul style="list-style-type: none"> foster students' reading ability & reading incentives enhance learning & teaching efficacy 	<ul style="list-style-type: none"> Subject-related knowledge
<ul style="list-style-type: none"> cultivate reading culture 	<ul style="list-style-type: none"> Reading habits
<ul style="list-style-type: none"> enhance students' independent learning ability & study skills enhance learning & teaching efficacy 	<ul style="list-style-type: none"> Communication Skills Organizational Skills
<ul style="list-style-type: none"> Facilitate technological development & enhancement in education 	<ul style="list-style-type: none"> Internet Utilization habits
<ul style="list-style-type: none"> enhance students' independent learning ability & study skills 	<ul style="list-style-type: none"> Research Skills
<ul style="list-style-type: none"> enhance students' independent learning ability & study skills develop intergenerational relationship 	<ul style="list-style-type: none"> Social Competence Problem-solving skills

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Student Learning (Primary School Student) - Reading Habits (N=204)

Question	Average score		% Increase
	Pre-test	Post-test	
1. Average number of visit(s) to school library for book-borrowing <small>(1 = 0 time, 2 = 1 time, 3 = 2 times, 4 = 3 times, 5 = 4 or more times)</small>	1.92	2.08	8.79%
2. Average number of visit(s) to public library for book-borrowing <small>(1 = 0 time, 2 = 1 time, 3 = 2 times, 4 = 3 times, 5 = 4 or more times)</small>	1.35	1.25	-5.43%
3. To what extent I like reading <small>(1 = Not interested, 2 = Somewhat not interested, 3 = Neutral, 4 = Somewhat interested, 5 = Very interested)</small>	3.76	3.99	6.12%
4. Frequency of sharing book with friend or classmates <small>(1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Frequently, 5 = Always)</small>	2.89	3.02	4.5%
5. Comparing to last semester, I think the number of books I read has been read <small>(1=largely reduced, 2=reduced, 3 = unchanged, 4= increased, 5=largely increased)</small>	3.3	3.42	3.64%




Student Learning (Primary School Student) – Internet Utilization Habit (N=204)

Question	No. of student (Pre-test)	No. of student (Post-test)	% Increase
7. I usually go online for.... (doing home work)	Yes: 90	Yes: 102	13.33%
9. The language I usually use when I am online (written language)	Yes: 85	Yes: 91	7.06%
Question	Average score		% Increase
	Pre-test	Post-test	
8. The time that I usually spend online <small>(1 = 0 hour, 2 = 1 – 7 hours, 3 = 8-14 hours, 4 = 15 – 21 hours, 5 = More than 22 hours)</small>	2.4	2.53	5.7%
10. Frequency of expressing the opinion on the books online <small>(1= Never, 2=Seldom, 3=Sometimes, 4=Frequently, 5=Always)</small>	2.49	2.75	10.44%




Student Learning (Primary School Student) (N=204)

Question	Average score		% Increase
	Pre-test	Post-test	
Subject-Related Knowledge.	3.97	4.16	5.54%
Communication Skills	3.00	3.26	8.67%
Social Competence	3.78	3.94	4.45%
Organizational Skills	3.57	3.77	5.66%
Problem-solving Skill	3.64	3.77	3.75%
Research Skills	3.74	4.09	9.35%



Student Learning

- Learnt more vocabulary & sentence structure
 - interacting with LU students
 - primary students feel their dictations and exams are better
- Reading Habits
 - “have more interests in reading”, “read more books”
- Communication Skills
 - “Learn to further develop the discussion based on others’ responses.”
 - “Further think more about the stories and others’ responses.”



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Student Learning

- Develop intergeneration relationship with more interaction with university students
 - pupils are willing to share their problems with university students
 - “I feel comfortable talking with them [university students], very relaxed.” *[Friendship and trust]*
 - “They [university students] won’t tell others about things we tell them.” *[Trust]*
 - “... the university students can play with us just like our friends.” *[Friendships and closeness]*





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Student Learning - Knowledge Exchange

- In the past, I would just answer “good, good, your answer is good.” But one of the big brothers [the university students] told me I should say “I think your answer is very good.”, but not reversing the words in the sentence, which would make it spoken Chinese. So I think my **organizational ability (in language)** has improved.
- “We didn’t just write [our feelings] onto papers after reading the books. People can’t reply to you if you just write [onto papers], but they can ask you questions if you type it out online.”



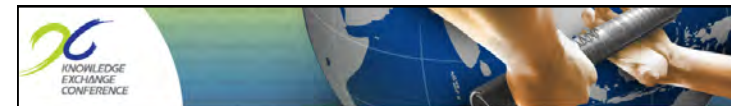
Student Learning - University Student

Domains	Average score		% Increase
	Pre-test	Post-test	
Subject-related knowledge	6.37	6.95	9.16%
Communication Skills	5.83	6.96	19.47%
Organizational skills	6.31	6.72	6.50%
Social competence	6.55	6.91	5.41%
Problem-solving skills	6.50	7.48	15.23%
Research skills	5.90	6.23	5.59%




Student Learning – Knowledge Exchange

- I learned a lot from this program. The one that I have the deepest reflection is the low computer ownership rate of the student that hindered them from logging on to the web page and leave messages at home. It makes me think that when we emphasize the importance of integrating IT in education, there are still a number of people who may not get enough support or ready to face the changes
- This program can let me know more knowledge about the technology and society.
- I would say my participation during the service period let me "experience" the course material, not only "learn" the knowledge.



Conclusion

- Service-Learning is an effective vehicle for knowledge exchange and enhancement of student learning
- Continuous programs or activities can create long term and sustainable impact on skills building, a way of knowledge exchange in the community and cross-generations.



KNOWLEDGE
EXCHANGE
CONFERENCE

Q & A

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The slide features a banner at the top with a logo on the left and a photograph of hands holding a globe on the right. The logo consists of a stylized 'K' and 'E' in green and blue, with the text 'KNOWLEDGE EXCHANGE CONFERENCE' below it. The photograph shows two hands holding a globe, symbolizing global knowledge exchange. The main body of the slide is white with the text 'Q & A' in large, bold, black font. A small number '21' is located in the bottom right corner of the slide.