

Rebuilding a Sichuan Community with Knowledge and Skills at the University of Hong Kong

This is a joint service learning project organized by the Department of Electrical and Electronic Engineering (EEE) and the Center for the Enhancement of Teaching and Learning (CETL) at The University of Hong Kong (HKU). Engineering students travel to Sichuan and take part in a community service project that encompasses numerous parts, all aiming at presenting goodwill and rebuilding an important part of the community (e.g., a school). Aside from applying academic knowledge to a real-world construction project, students also develop generic competencies through

the process of interacting with others in an authentic work environment.

Distinctive Features:

- ✔ Recognising students' commitment and services with certificates jointly issued by the organisers
- ✔ Bringing in students' knowledge and skills to rebuild a Sichuan school and help victims of the Sichuan earthquake
- ✔ Enabling long-term support for the education of Sichuan children

Intended Learning Outcomes (LO):

- I. Ability to apply enduring life-long skills, such as planning communication and team building with a variety of age groups and types of people.
- II. Ability to apply prior academic knowledge and life experiences to service others in need.
- III. Develop skills on how to think out of the box and problem solve in real-life situations.
- IV. Develop intercultural understanding & awareness of other cultures.
- V. Develop the capabilities of critical self-reflection and greater understanding of others, upholding personal & professional ethics.

Source: HKU (2015)

Coursework Teaching & Learning Activities:

- ✍ Presentation at Interflow Conference
- ✍ Caring activities
- ✍ Reconstruction project
- ✍ Teaching activities
- ✍ Team building activities
- ✍ Lab visit
- ✍ Cultural visit
- ✍ Daily reflective journal
- ✍ Summative report
- ✍ Post-trip evaluation interview

Assessment Approaches

	Name	Learning Activities	Weight	Aligned LO	Type	Generic Skills
A1	Presentation	Done in interflow conferences, assessed by EEE instructors, teachers in Sichuan, and peers.	25%	I.	Summative	Communication, Problem solving
A2	Daily reflective journal	Assessed on content and quality by EEE and CETL instructors	5% x5 days	IV. V.	Formative	Critical thinking, Self-management
A3	Summative report	A 2000-word report submitted after the trip that is assessed on content and quality by EEE and CETL instructors	20%	II. III.	Summative	Critical thinking, Problem solving, Study skills
A4	Cooperation and management	Assessed on team building activities by professional assessors in Sichuan	10%	I. II. III.	Formative	Collaboration, Communication, Problem solving
A5	Initiative to learn and contribute	Assessed on student's daily performance by supervisors of the project team	10%	I. II. III.	Formative	Self-management

A6	Post-trip evaluation interview	Conducted and assessed by CETL	10%	III. V.	Summative	Critical thinking, Communication, Problem solving
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Source: HKU (2015)

Assessment Type

Both formative and summative assessments are employed. This allows assessment of students' progress throughout the project, and the focus on self-reflection in most of the assessment measures prompts students to constantly reflect on their experience during and after the service.

Assessment Focal Areas

Self-management skills: In this project, students have to manage themselves. With daily reflective journals (A2) and assessments on students' initiative to learn and contribute (A5), students need to manage their time, and make conscious effort to learn and gain skills during the service so as to gain the most out of the experience. Moreover, as the service project takes place in Sichuan, students are away from home and not in their comfort zones. This enhances their self-management skills as they have to be independent and responsible for themselves.

Knowledge application: Students are expected to relate what they have learnt in lessons to their experience throughout the service project. With the summative report (A3) and post-trip evaluation interview (A6), students can look back on their

experience in Sichuan and compare that to what they have learnt in lessons. As the scope of works in the project include hands-on practice such as setting wires on a rooftop, students can apply engineering theories and various skills they have learnt in university lectures to such activities.

Reflection: Most of the assessment measures require students to reflect on their experience during the service project. Self-reflection is a criteria in daily reflection journals (A2), and students have to record what they have done and learnt every day, also whether they have used their previous experience or knowledge to contribute to their work. The summative report (A3) and post-trip evaluation interview (A6) require students to summarise their experience and reflect on their work, what they have learnt and how they have improved.

Assessment Standards/ Sample Rubrics

	Marking Rubrics	Excellent	Proficient	Average	Poor
A1 Presentation	Content: Relate to topic, detailed and accurate	All content directly related to the topic, Opinions were always supported by fact if possible.	Content directly related to the topic. Almost all opinions were supported by facts.	Demonstrated basic understanding of the topic. Many opinions were not supported by facts.	Few facts related to the topic. Most information was opinion.
	Knowledge: Demonstrate knowledge of the subject	Showed a thorough knowledge of the topic. Able to use assessor questions to further demonstrate understanding of the topic. Appeared to be an expert on the subject being presented.	Showed a working knowledge of the topic. Able to satisfactorily answer assessor questions and provided additional information upon request.	Showed basic knowledge of the topic. Able to address assessor question by repeating parts of the presentation – did not provide any additional information.	Showed little or no knowledge of the topic. Unable to answer assessor questions or comment further on any part of the presentation.
	Posture/ Eye Contact/ Mannerism: Appropriate posture and effective eye contact	Stood upright and appeared confident throughout. Avoided rocking, shifting and other nervous behavior. Made eye contact throughout the assessors.	Posture was good for most of the presentation. Made eye contact numerous times during presentation. Did not rely too heavily on notes or visual aids.	Sometimes rocked, shifted, or appeared uncomfortable. Made occasional eye contact with one or two audience members. Did not rely too heavily on notes or visual aids.	Posture was poor. Slouched, shifted from foot to foot, and appeared very uncomfortable. Made almost no eye contact with the audience. Looked down at notes or visual aids.

Enthusiasm: Energetic, confident, not frenetic	Appeared enthusiastic and confident at all times. Moderated level of excitement to hold audience's attention.	Appeared enthusiastic and confident at all times. May have appeared overly enthusiastic at times. Held audience interest for most of the time.	Showed some confidence and little excitement about the topic. Attempted to modify behavior to engage audience on one or more occasions. Lost attention of some audience members.	Showed little or no enthusiasm about the topic. Nervous. Did not moderate level of excitement in response to audience reaction. Low audience interest.
Audience: Engage and interact with audience	Moderated speaking style based on audience feedback. Calmly and eloquently addressed audience questions and comments. Engaged audience for the duration of the presentation.	Adjusted volume, pace, and enthusiasm several times. Answered audience questions and addressed comments. Presenter adjusted enthusiasm or pace to hold audience attention.	Spoke more loudly when requested by audience members. Presenter was clearly uncomfortable. Presenter attempted to adjust enthusiasm or pace to hold audience attention.	Did not adjust speaking style based on audience reaction. Could not answer audience questions. Presenter made no visible effort to hold audience interest.
Pace: Speaks at an appropriate pace	Speaker adjusted pace to stay within allotted time. Speaker answered audience questions without overdo it or covered additional material if there were no questions.	Speaker's pace was appropriate throughout.	Tended to speak too quickly or too slowly.	Consistently spoke too fast or too slow.
Timing: Length of presentation, length of Q&A	Perfect timing	Adequate timing	Too short or too long	Finish abruptly

Source: The University of Hong Kong (2015)

Teacher's Stories

Dr. Cecilia KY Chan, Head of Professional Development, Associate Professor, The University of Hong Kong.

Professional Engagements

Dr. Cecilia Chan has a MA degree in Learning and Teaching and a PhD in Engineering. She has been involved in the implementation of outcomes-based approach to student learning, assessment, feedback and technology enhanced learning pedagogies and tools. Dr. Chan has been researching and practicing student development and assessment of holistic competencies for over 15 years. At HKU, She provides consultations to faculties regarding the design and assessment of research projects, grants and initiatives. Dr. Chan also leads, builds and supports faculty efforts to incorporate community into skills and knowledge related to scholarships and assessments of teaching and learning. Her research interests lie in Engineering and Science Education,

Development of Generic Skills, Assessment, Community of Practice, and Technology Enhanced Learning.

Motivation

Dr. Chan believes that learners have to experience, reflect, think and act in a cyclic process to learn. She writes that "*Experiential learning particularly community service learning projects in engineering education promote both intellectual and civic engagement by relating academic learning to real-world problems and needs, engaging students in improving and solving social problems*" (Chan 2015). Engaging students in an authentic experience, students learn through providing services to the community, and as students reflect on their experience, they also develop new skills and new attitudes.

Challenges

Some may argue that assessing student participation in service learning may diminish the meaning of such

a learning experience. Moreover, it increases teachers' workload to design and implement

assessment measures that is of the same standard as required by the university.

Students' Side of Stories

✔ “By seeing the child's smile, I was more convinced that all the tasks we doing were of great significance. This was my first time as a volunteer working in the field. Therefore, this time was rather impressive compared to the previous volunteer experience. With the assistance of Dr.Fok and Elaine, my team members and I learned a lot of valuable knowledge in the trip. Once again, I thank them for their help.” (Student K, Apr 2010)

✔ “During the class breaks, we toured around their school, encountering some small and dim barn-like buildings without even electricity! In fact, these were homes to the children and teachers for almost a year. Due to technical problem, the electricity would go off for the whole school if they turned on the light and thus would affect their daily study and living. As a result, the only thing they could do to avoid that kind of situation was to compromise on living in these dim buildings without electricity. I was shocked and speechless when I learned this, grieving deeply the enormous impact the earthquake had on these children's daily life. After all, I felt a bit relieved in that I had tried what I can

to help ease their misfortune. But I thought I learned even more from them than what I had provided.” (Student C, Apr 2010)

✔ “It is not just about how beautiful the scenery of Sichuan is, but it is about the people we met. Everyone that we came across had a beautiful and genuine smile on their faces. It is almost impossible to tell that they had experienced the trauma from the earthquake not long ago. I was honored to be able to interview some of the local teachers there. They were all very genuine in sharing their own past experience. This genuineness is beautiful but rarely seen in prosperous and busy city like Hong Kong. These Sichuan people have high hopes in life and are easily content with simple things around them. It helps me reflect how good a life I am living in Hong Kong but I still always worry for little things. “It is always better to give than to receive.” It is an old saying but I truly experience that in this trip. It looks like we were helping the one helping the Sichuan people. Indeed, we were able to learn how to help people with our professional skills. Also, we were privileged to be able to learn about toughness and joy in life from them.” (Student H, Apr 2010)

Featured Video

▶ Students served in Sichuan Reconstruction Project: <https://uvision.hku.hk/playvideo.php?mid=12532>

References

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- The University of Hong Kong (2015) Reconstruction and Interflow in Sichuan Experiential Learning (RISE Learning): A Pilot Project of Community Service Learning – Experiential Education. Retrieved from <http://www.cetl.hku.hk/teaching-learning-cop/wp-content/uploads/2015/06/Experiential-Learning-in-Sichuan.pdf> (accessed 29 Mar 2018)