Connecting Students to the Real World
The PolyU Experience

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Our Motto:

" **To learn and to apply,
for the benefit of mankind.** "

Work-Integrated Education
where work experience is integrated with the academic programme

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Work-Integrated Education
- **work-based learning**
- **In an organizational context**

Mandatory WIE since 2005 to

a. Affirm our positioning to offer academic programmes in a professional context
b. Enhance student employability
c. Develop all-round students

Structured:

- **Work experience should be purposefully designed to provide intentional learning with intended outcomes.**

Learning Outcomes include:

- **Professional knowledge & skills**
  i.e. application in the real world
- **All-round attributes**
  i.e. employability

Measurable:

- **Learning outcomes should be documented**
- **Assessment of the attainment of learning outcomes**
- **Provision of student feedback**

Mandatory WIE since 2005

- Sandwich training
- Clinical placement
- Summer internship
- Final Year Project/Integrated Manufacturing Project
- Service Learning Project

Here are some suggestions of possible Internship Projects:

Research and Database Management	Help research on industry landscape and competitive environment and construct a listing of potential and existing clients with details about their products, personal and professional information, mailing addresses, etc. for marketing or business development purpose.
Software Programme	Help prepare proposals for setting up computer systems to perform specific functions for the partner company after collation of user requirements and analysis of business needs. Provide support to system maintenance and update.
Operations Research	Help conduct preliminary self-studies and evaluations of institutional or organizational processes and performance outcomes to make recommendations for enhancement of efficiency.
Office Organization	Help revamp and redesign work flow, documentation and information management and internal and external communication, etc. for higher efficiency and effectiveness.
Marketing and Promotion	Participate in coordinating company events and activities, production of documentaries, video clips, PowerPoint presentations, on-line presentations, press articles, newsletters, posters and brochures, etc.

Up to 2011, 4 cohorts of graduates with WIE.

Over 10,000 students have had WIE experience

Benefits to Employers

- Select students from application-oriented academic courses
- Bring in fresh ideas
- Encourage cross-cultural exchange
- Meet short-term staffing needs
- Promote goodwill & image

Benefits to Students

- **Develop employability**
- **Develop work competencies**
- **Gain a greater sense of responsibility & personal direction**
- **Gain practical experience related to study or career goals**
- **Receive feedback from employers**

Knowledge Exchange in WIE

- **An effective way to let students, academics and employers talk and listen to one another.**
- **Facilitate "contact sport"**
- **Real-life conversations that make sense**

Online Exit Survey

Learning Gains
- **16 specific areas + 1 overall**
- **10 pt scale (very little – very much)**
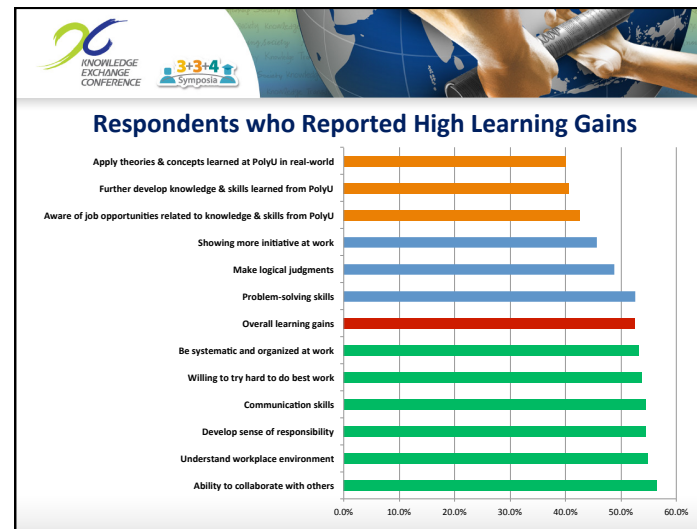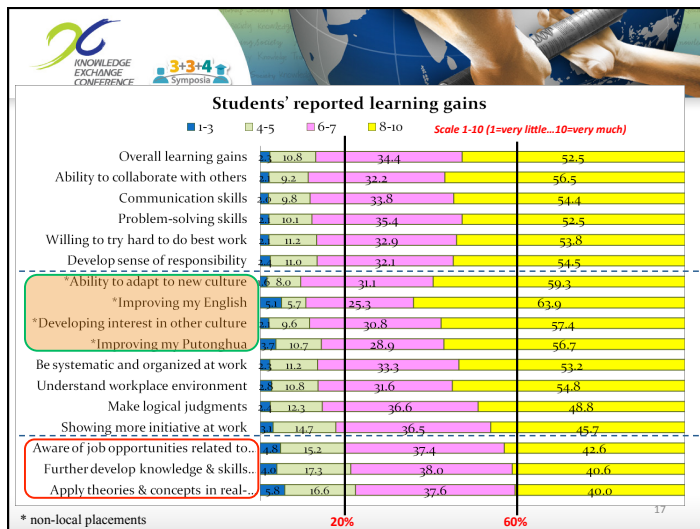
Learning Opportunities
- **Contextual**
- **Motivation – students own efforts**
  - 10 questions
  - 6 pt scale (strongly disagree – strongly agree)

The 16 Specific Learning Gains are…

- ☑ **Work attitude: initiative, responsibility, try hard to do best work**
- ☑ **Collaboration & communication**
- ☑ **Systematic thinking: problem-solving, logical judgment, systematic/organized**
- ☑ **Enhancing university learning: further develop knowledge & skills learned, applying theories & concepts to the real-world**
- ☑ **Work-related knowledge: clearer understanding of workplace, seeing more possible job opportunities using knowledge & skills**
- ☑ **Language: English/ Mandarin skills (non-local only)**
- ☑ **Global outlook: adapt to new culture, interest in other cultures**

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Slide 1

Students' reported learning gains

Legend: 1-3 | 4-5 | 6-7 | 8-10 *Scale 1-10 (1=very little...10=very much)*

Category	4-5	6-7	8-10
Overall learning gains	10.8	34.4	52.5
Ability to collaborate with others	9.2	32.2	56.5
Communication skills	9.8	33.8	54.4
Problem-solving skills	10.1	35.4	52.5
Willing to try hard to do best work	11.2	32.9	53.8
Develop sense of responsibility	11.0	32.1	54.5
*Ability to adapt to new culture	8.0	31.1	59.3
*Improving my English	5.7	25.3	63.9
*Developing interest in other culture	9.6	30.8	57.4
*Improving my Putonghua	10.7	28.9	56.7
Be systematic and organized at work	11.2	33.3	53.2
Understand workplace environment	10.8	31.6	54.8
Make logical judgments	12.3	36.6	48.8
Showing more initiative at work	14.7	36.5	45.7
Aware of job opportunities related to...	15.2	37.4	42.6
Further develop knowledge & skills...	17.3	38.0	40.6
Apply theories & concepts in real-...	16.6	37.6	40.0

20%   60%

* non-local placements

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Slide 2

Respondents who Reported High Learning Gains

Apply theories & concepts learned at PolyU in real-world
Further develop knowledge & skills learned from PolyU
Aware of job opportunities related to knowledge & skills from PolyU
Showing more initiative at work
Make logical judgments
Problem-solving skills
Overall learning gains
Be systematic and organized at work
Willing to try hard to do best work
Communication skills
Develop sense of responsibility
Understand workplace environment
Ability to collaborate with others

0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0%

Slide 3

Multiple Regression

For each learning gain scale, a separate regression

- Which contextual factors uniquely predict that LO?
  - Unique relationships minus effect of other contextual factors

All simple correlations significant – tease out the unique effects

Slide 4

Predictors	Learning Gain Scales					
	Work Attitude	Collaboration & Communication	Systematic thinking	Enhancing University Learning	Work-related Knowledge	Global Outlook
1. Know what want to learn before placement						
2. Interest & Challenge	X	X	X	X	X	X
3. Frequency of Feedback			X	X	X	
4. Feedback improve workplace competence	X	X	X	X	X	X
5. Stimulate think about university learning			X	X	X	
6. Require work w/ others	X	X			X	
7. Opportunity to interact different people	X	X	X		X	X
8. Effort to maximize own learning	X	X	X			X
9. Effort to learn by observing others	X	X	X			X
10. Effort to link work with university learning				X	X	

Learning Outcomes

A worthwhile experience

- Great majority of students reported learning gains
- 40-64% getting high specific learning gains (8+), especially
  - Work Attitude (responsibility, try do best work)
  - Collaboration & Communication Skills
  - Problem-Solving Skills
  - Better Understanding of Workplace
  - Language & Global Outlook (non-local placements)

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Summary - Context

Most important, fairly pervasive

Interesting & Challenging

Feedback to improve students' workplace competence

Students' own efforts
- Maximize own learning
- Learn by observing others

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Some differences between generic outcomes and more academically-related ones.

- Generic – required work with others, interact different people, students own efforts to learn (max, observation)

- Academic – links with university learning (nature of placement and student's efforts)

May inform program design, selection of placements

http://www.polyu.edu.hk/wieinfo/showcase/category/department/fast/itc/

http://www.polyu.edu.hk/sao/allround/2011/01/pages/showcase/2273.html

Design Student placed at Capital Museum and National Art Museum of China in Beijing

KNOWLEDGE EXCHANGE CONFERENCE 3+3+4 Symposia

Organised by PolyU in collaboration with Sham Shui Po NGOs

Commenced in July 2010 till Aug 2011 initially

Objectives:

- **To organise more sustainable services by focusing the manpower and resources in serving a relatively deprived district, Sham Shui Po.**
- **To encourage students to apply their professional knowledge and skills in serving the needy people.**
- **To develop students' sense of social responsibility, interpersonal skills, problem solving skills & teamwork.**

CSLP @ Sham Shui Po

Forms of collaboration

| NGOs | service requests | PolyU |

| PolyU students | initiate projects | Sham Shui Po |

| PolyU + NGOs | jointly discuss | service projects |

CSLP in SSP Participation Statistics

- Partner NGOs: 23
- Collaborating academic depts: 13
- Projects completed: 35
- On-going/new projects: 5
- Volunteers involved: 337

Caring the elderly 關懷長者活動

NGO: Hong Kong Family Welfare Society

PolyU Departments: School of Nursing + Applied Social Sciences

Nature: Provision of care and love for the elderly people by home visits and eye screening

No. of students: 74

Students' Role: SO students ran eye screening for the elders, and APSS students conducted a series of 3 home visits and took the elders out to the places nearby

Duration: 6 months

Service hours: 30 per student (approx.)

Training by NGO: 2 hours on skills in communicating with elders and people with disabilities

Promotion of IT to Elderly People

NGO: HKYWCA Lam Woo Memorial Day Care Centre for the Elderly

PolyU Departments: Electronic Engineering + Computing

Nature: Stimulate the interest of the elderly people in IT

No. of students: 14

Students' Role: Students to design a computer game and assistive devices for the users

Duration: 10 months

Service hours: 40 per student (approx.)