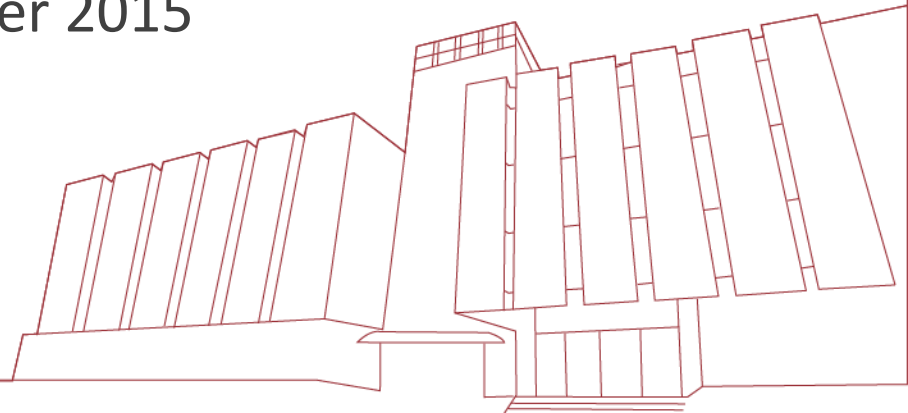


Bridging the Information Literacy Gap: Understanding Information Behaviour and Developing an Evidenced-based Multimedia Courseware to Enhance Information Literacy in Hong Kong

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University Librarian, The Hong Kong Polytechnic University

IATUL Workshop on Information Literacy
November 2015



Hong Kong

- **Population:** 7.26 M
- **Four key industries:** Financial Services, Tourism, Trading & Logistics, Professional Services (e.g. Legal, Accounting, Engineering, I.T.)



The Hong Kong Polytechnic University

- Students: 32,254
(PG: 10625)
- Staff: 4,812
- Alumni: 355,000
- 6 Faculties (with 25 academic units)
& 2 Schools
- Taught programmes: 221



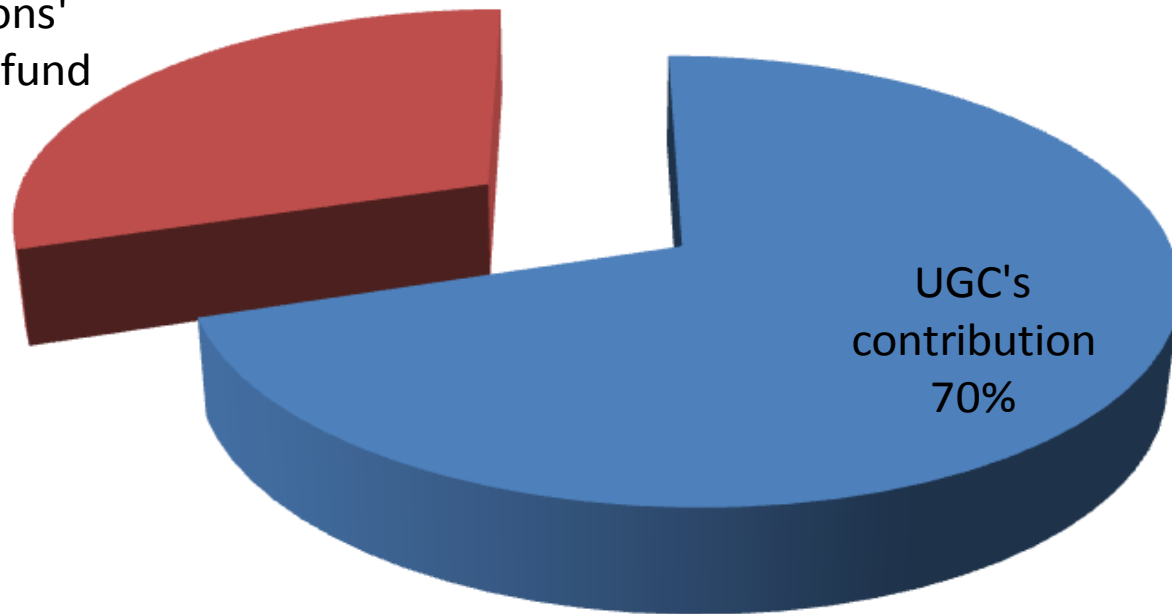
First large scale cross-institutional information literacy project in Hong Kong

Project Title:	Enhancing information literacy in Hong Kong higher education through the development and implementation of shared interactive multimedia courseware
Leading Institution:	The Hong Kong Polytechnic University
Other Participating Institutions:	All 8 publicly funded higher education institutions in Hong Kong PolyU, CUHK, CityU, HKBU, HKIEd, HKUST, HKU, LU
Principal Investigator:	Dr Shirley Chiu-wing Wong, University Librarian, The Hong Kong Polytechnic University

Project Fund

mainly from the University Grant Council (UGC) Funding Scheme for Teaching and Learning Related Proposals

Participating institutions' matching fund
30%



UGC's contribution
70%

Project Team

- Members:
 - Library directors of all eight publicly funded higher education institutions in Hong Kong
 - Three faculty members, one each from the three largest institutions
 - Honorary Consultant: Prof Christine Bruce of Queensland University of Technology, Australia, author of *The Seven Faces of Information Literacy*



What is Information Literacy?

The ability to recognize when information is needed, to locate, evaluate, and use effectively the needed information:

- Determine the **extent** of information **needed**
- **Access** the needed information effectively and efficiently
- **Evaluate** information and its sources critically
- **Incorporate** selected information into one's **knowledge base**
- **Use** information effectively to accomplish a specific purpose
- Understand the **economic, legal, and social** issues surrounding the use of information, and access and use information **ethically and legally** (Association of College & Research Libraries, 2000)

What is Information Literacy?

Experience of using information to learn via a reflection process enables the transfer of the learning process to new contexts, thus, facilitating student-centered inquiry-based pedagogies and lifelong learning (Bruce, 2008)



The need for information literacy enhancement in HK higher education

- University freshmen (Wong, 2011)
 - Very limited experience in information use for research tasks in school years
 - Weak in using scholarly information sources and search tools
 - Heavy reliance on quick web information for research tasks
 - Weak capability in evaluating information and acknowledging sources
- Postgraduate students (Chu & Law 2007a, Chu & Law 2007b, Chu & Law 2008)
 - Even PhD students start out ignorant of many important scholarly sources and need help to develop their information skills

The need to understand information behaviours among university students in Hong Kong

- Limited research conducted focusing on information literacy among university students in Hong Kong
- **Large-scale comprehensive study** needed to fully understand student information behaviours → to assess local information literacy educational needs in Hong Kong

Inadequate information literacy embedment in HK higher education compared to countries worldwide

- International trend to integrate information literacy (IL) into university curricula
- Not a standard practice in Hong Kong yet

Key Deliverables of Project

- A knowledge base on the information behaviours of students
- An interactive multimedia IL courseware addressing the local IL educational needs
- An IL self-assessment tool
- Training for librarians in embedding IL into the university curricula
- Embedding IL into curricula with the “Course Enhancement Funds”

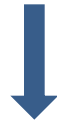


Project objectives

Bring about a paradigm shift to valuing information literacy among university management and faculty



Embed information literacy into university curricula



Enhance information literacy among students



Seven Project Phases

Student needs assessment & development of RRSA HK

Interactive multimedia courseware design

Evaluation & refinement of courseware

Implementation

Evaluation

Continuous updating
&
Ongoing training

Capacity
building
programme

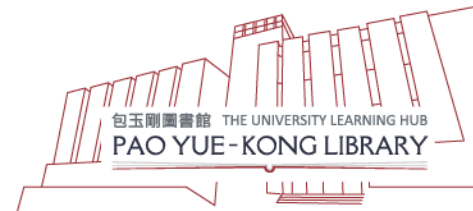
Course
Enhancement
Funds

Phase 1

Assessment of IL educational needs &
development of an IL self-assessment tool
(RRSA-HK)

Qualitative need assessment on information behaviour

- Strong emphasis on local context, including:
 - Observations and process analysis of information tasks performed by students
 - Analysis on student inquiry projects to review information sources cited and format
 - In-depth interviews with students and faculty members
- Sample size = 96 students
- Tasks analysis will be screen captured
- Whole process audio-taped

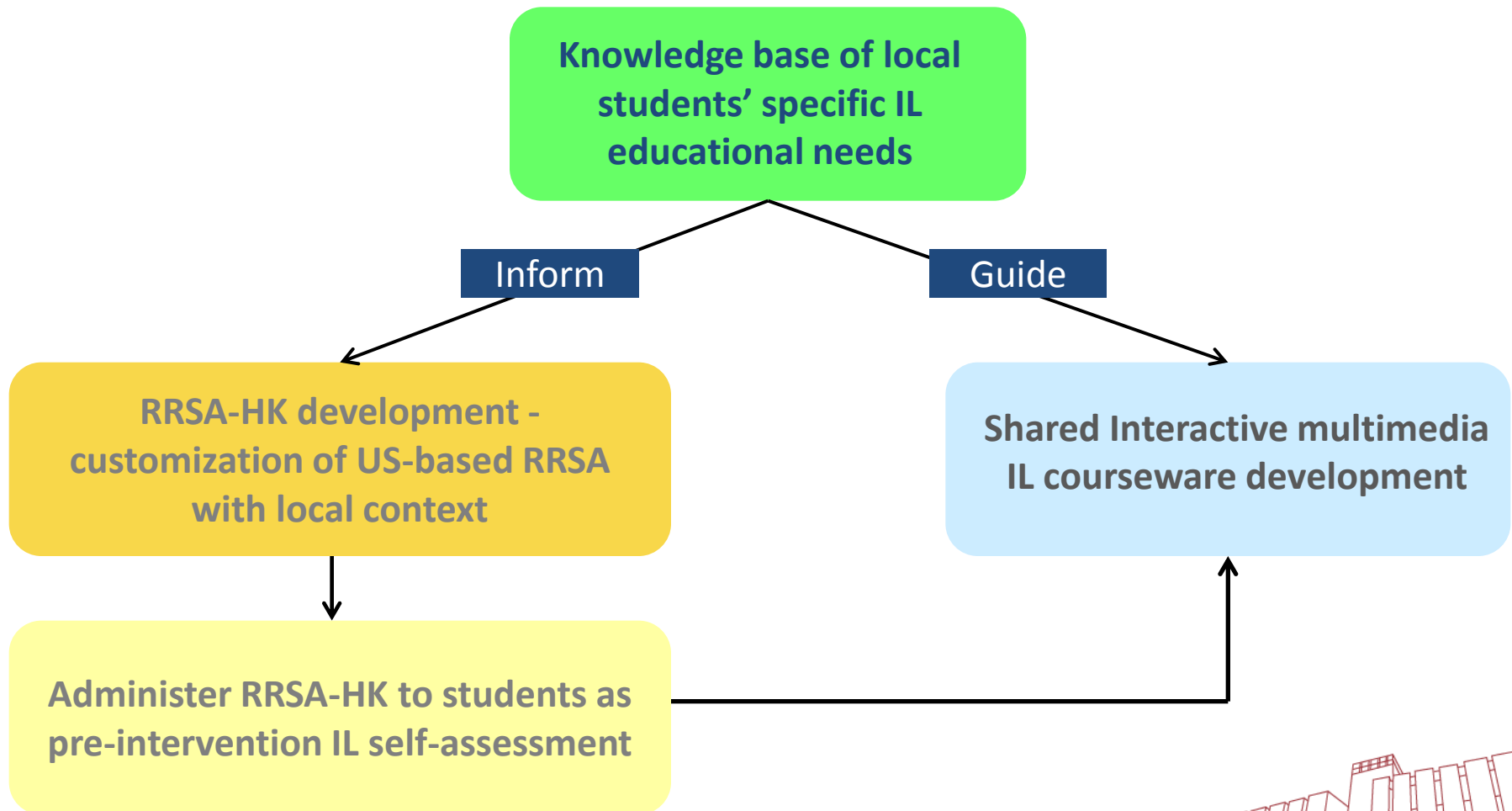


Where are we at now?

Task analysis with students

Timeline	
Aug 2015	IL task analysis and courseware - divided into eight subject disciplines.
Sep 2015	PolyU designed the first draft of the information task, based on real-life problem scenario of business/economics.
Late-Sep 2015	PolyU arranged a pilot test of information task. After which the task will be further fine-tuned.
Early Oct 2015	A training session for JULAC staff on how to conduct an effective interview will be provided. All JULAC Libraries will also receive the up-to-date information task and then customize it with their designated subjects.
Oct -Nov 2015	Each JULAC Library will recruit 12 students (based on the assigned subject, various years of study) to complete the information task. IL project staff will work with each member on the first two interviews to ensure the data drawn is valid and consistent among others.
Jan – Feb 2016	Data analysis.

Findings from qualitative need assessment used to form:



Phase 2

Design of a shared interactive
multimedia IL courseware

Courseware development – subject division

Each institution would work on a subject specific module on top of the general introduction:

Subject	Institution
Arts/Humanities	Lingnan University
Business & Economics	PolyU & The German National Library of Economics
Education	Hong Kong Institute of Education
Engineering	The Hong Kong University of Science and Technology
Health Sciences	The University of Hong Kong
Law	City University of Hong Kong
Social Sciences	The Chinese University of Hong Kong
Science	Hong Kong Baptist University

Design of a shared interactive multimedia courseware features

- Centralized IL learning platform shared among all 8 publicly funded institutions
- Contents aligned to learning needs identified in phase 1 & IL theoretical framework
- Authentic tasks that reflect real life situations
- Modular approach
- Readily embedded into Learning Contents Management Systems
- Interactive - e.g. decision tree simulation, games & animations, visual & audio effects to engage learners
- Online formative assessment activities & discussion forums

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The image shows the word "MOOC" in a large, bold, black, sans-serif font. The letters are slightly tilted to the right. The logo is centered on a white rectangular background that has a subtle drop shadow, making it appear to float above the other content.

Courseware development

Collaborative effort from:

- Project team
- Librarians of all 8 participating institutions in Hong Kong
- German National Library of Economics
- Open edX project team in Hong Kong
- Contract for service software designers

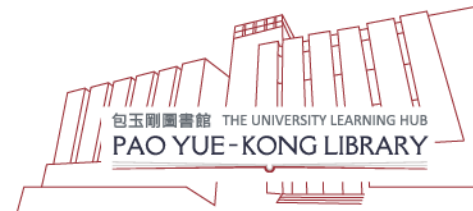


Phase 3

Evaluation and refinement of courseware and its elements

Evaluation and refinement of courseware

- Pilot run of courseware on selected teaching programmes before launch
- Conduct usability test with student feedback on:
 - Learnability
 - Efficiency
 - Memorability
 - Errors
 - Satisfaction
- Refinement based on above evaluations



Phase 4

Capacity building in enhancing IL

Capacity building programme for librarians

Phase 4

- Information Literacy assessment
- Research assignment design
- Building collaborative partnerships



包玉剛圖書館 THE UNIVERSITY LEARNING HUB
PAO YUE-KONG LIBRARY

Phase 5

Course enhancement funds for promoting partnerships between faculty and librarians

Course enhancement funds for promoting partnerships between faculty and librarians

- 40 course enhancement funds, HK\$15,000 (1,935 US\$) (1,730 EURO) each
- For teaching staff to work with librarians to
 - Develop new information literacy content
 - Modify existing research assignments and assessments
- Funding may be used to support hiring Teaching Associate or Instructional Assistant

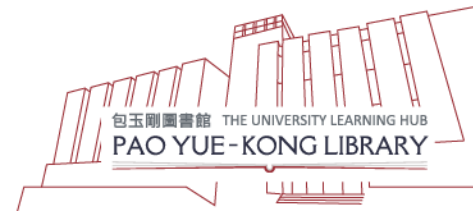


Phase 6

Implementation of the courseware with an integrated and embedded approach

Implementation of the courseware with an integrated and embedded approach

- Faculty or subject librarians working closely with respective programme coordinators and individual teaching staff
- Certificate programme on the courseware through blended learning
- A half day symposium and seminars for university management and faculty members
- Meetings with university management, deans and department chairs
- Campus awareness campaigns

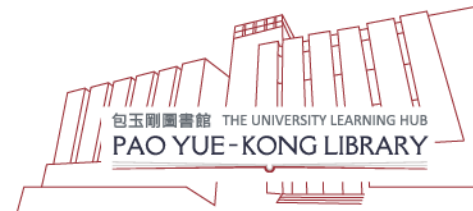


Phase 7

Evaluation of the outcomes and impacts of the project

Evaluation of the outcomes and impacts of the project

- RRSA-HK as post-intervention IL self-assessment to students
- Formative assessments built into the courseware modules
- Usability studies, including satisfaction level among faculty and students
- User surveys
- Usage analysis



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Thank you

