Managing International Assessment: Capacity Building for Different Stakeholders

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Overview

• Learning from International Study (The case of HKPISA2000+-2015)
• Capacity Building for Administrators, Subject experts and Researchers in CHINA
• Capacity Building through different Dissemination Measures across countries
• Using International Assessment Results to inform different stakeholders: The case of Hong Kong
I. Learning from International Study (The case of HKPISA2000+-2015)

Capacity building for different stakeholders

• Provide information of reading, math and science performance to general public.
• Provide indicators of school effectiveness for school and educators.
• Provide education indicators at system level to policy maker to inform direction of educational reform
• Connection of parents, educators and policy makers
• Capacity building and sharing with Chinese societies:
  • By Training workshops, seminars and consultancy to support Chinese societies: PISA 2003 in Macau; PISA 2006 Trial in several provinces in Mainland China; and PISA2009 for Shanghai
II. Capacity Building for Administrators, Subject experts and Researchers in CHINA by HKPISA Center
HKPISA Center
Provide consultancy and training

• HKPISA center was invited by National Education Examination Authority (NEEA), Ministry of Education, PR China provide consultant and training service for NEEA’s initiation of PISA2006 trial in several provinces

• The services including: Training of project administrators in matters of sampling strategy, field administration, coordinating with the sampled schools, quality assurance. Training of subject experts in marking of open-ended items and manipulation of the data entry software through the experts of the HKPICA center; and Training of researchers on multilevel analysis for data collected
Workshops HKPISA center provided: A case of China 2006

- **Workshop I for national experts and administrators:** Overview and Implementation of PISA (5-7 Nov 2006)
- **Workshop II for subject experts:** coding of open ended question and questionnaires (28-30 Dec 2006)
- **Workshop III for researchers & policy analysts:** Multilevel analysis of national and international dataset, demonstrate the process of PISA data analysis and the production of report in Hong Kong and train experts and young scholars to the multilevel analysis. Various dissemination measures are shared (March 2007).
### III. Capacity Building through Different Dissemination Measures

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Luxembourg</td>
<td>Australia</td>
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<td>Austria</td>
<td>Macao</td>
<td>Austria</td>
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<tr>
<td>Brazil</td>
<td>Montenegro</td>
<td>Belgium (F)</td>
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<tr>
<td>Canada</td>
<td>Netherlands</td>
<td>Chile</td>
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<td>Chile</td>
<td>New Zealand</td>
<td>Czech R.</td>
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<td>Croatia</td>
<td>Norway</td>
<td>Finland</td>
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<td>Czech Republic</td>
<td>Slovenia</td>
<td>Israel</td>
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<tr>
<td>Dubai UAE</td>
<td>Spain</td>
<td>Mexico</td>
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<tr>
<td>Estonia</td>
<td>Sweden</td>
<td>Slovak R.</td>
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<tr>
<td>Germany</td>
<td>Taiwan</td>
<td>Sweden</td>
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<tr>
<td>Greece</td>
<td>Thailand</td>
<td>Turkey</td>
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<tr>
<td>Hong Kong</td>
<td>United States</td>
<td></td>
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<tr>
<td>Hungary</td>
<td>Uruguay</td>
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</tbody>
</table>

For the PISA 2012 cycle, with the Secretariat: 11 countries added. New focus on audiences targeted.
Dissemination Measures commonly used across 27 Countries in 2010 by HKPISA center

- Leaflets/...: 78%
- Thematic Reports: 85%
- Reference Material for Teachers: 59%
- Newsletter: 44%
- Feedback/Recognition to Schools: 33%
- Seminar/Workshops: 70%
- Web-based Dissemination: 70%
- Publicity through Media: 70%
- Others: 67%
- Others: 22%
Efficiency of Dissemination Measures across countries 2012 by OECD (11 countries)
Audience targeted by dissemination activities (2012)

- Teachers
- Schools
- Principals
- Policy makers
- Media
- Teacher Unions
- Students
- Other social partners
- Parents
- Parent organisations
- Researchers*

* Researchers was not mentioned in the survey but countries highlighted it in the “others” categories.
IV. Using International Assessment Results to inform different stakeholders: The case of Hong Kong

- School teachers and administrators
- General Public
- Policy makers
- Researchers
School Seminar

For School Administrators & Teachers

Reading, Mathematical and Scientific Literacy of Hong Kong Students

2010.12.14
Tuesday/星期二
2:00 pm - 5:30 pm
Lecture Theatre 1, Teaching Building at Chak Cheung Street, CUHK

Online Registration
http://www.fed.cuhk.edu.hk/~hpisa/schoolseminar
http://www.fed.cuhk.edu.hk/hkier/schoolseminar

Program:
Rundown:
2:00 pm - 2:30 pm 參加者登記及參觀展覽, Registration & Exhibition
2:30 pm - 5:30 pm

Session 1
香港基礎教育的成就與挑戰：由PISA2000+到PISA2009
Overview of Accomplishment & Challenges of Hong Kong Basic Education: From PISA 2000+ to PISA 2009

Session 2
香港學生的閱讀、數學與科學能力
HK students' performance in Reading, Mathematical and Scientific literacy

Session 3
如何閱讀HKPISA 2009學校報告
Reading HKPISA 2009 School Report

Enquiries
2003 7209
### Table 2: Average Scores in the Test Domains and Indices

**Test Date:** 19 May 2009  
**Language of Assessment:** English

<table>
<thead>
<tr>
<th>Test Domains</th>
<th>Average scores of your school</th>
<th>Average scores of all schools tested in English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>71%* (21%) n = 33</td>
<td>56% (21%) n = 1171</td>
</tr>
<tr>
<td>Mathematics</td>
<td>46%* (22%) n = 19</td>
<td>59% (21%) n = 805</td>
</tr>
<tr>
<td>Science</td>
<td>67%* (19%) n = 24</td>
<td>59% (22%) n = 808</td>
</tr>
</tbody>
</table>

| Reading Engagement    |                                |                                               |
|-----------------------|                                |                                               |
| Enjoyment of Reading  | 2.60* (0.70)                   | 2.91 (0.49)                                  |
| Diversity of Reading Materials | 3.23 (0.83) | 3.31 (0.70)                                  |
| Online Reading Activities | 4.21* (0.58) | 3.71 (0.55)                                  |

| Approaches to Learning\(^5\) |                                |                                               |
|------------------------------|--------------------------------|                                               |
| Memorization                 | 2.65 (0.76)                    | 2.58 (0.60)                                  |
| Elaboration                  | 2.49 (0.73)                    | 2.32 (0.62)                                  |
| Control Strategies           | 3.11 (0.78)                    | 2.89 (0.57)                                  |

| Language Lessons\(^5\)      |                                |                                               |
|------------------------------|--------------------------------|                                               |
| Disciplinary Climate         | 3.25 (0.34)                    | 3.23 (0.61)                                  |
| Teachers Stimulation of Reading Engagement | 2.87* (0.46) | 2.31 (0.54)                                  |
| Use of Structuring and Scaffolding Strategies | 3.23* (0.49) | 2.58 (0.57)                                  |
For Teachers
- Professional Development

Seminar (over 200 teachers)
• Aim: to nurture Assessment literacy of different subjects
• Content: How PISA measures reading/mathematical/scientific literacy of students
  An analysis of Hong Kong students’ performance in the relevant literacy domain
• Materials: An examination of the released assessment items of PISA
• Collaboration: HKPISA center with Government & Teacher Associations
Pedagogical Practice Guide
Workshops for teachers
Our design of Workshop with Action research (Activity 1: Workshop)

- Analyzing the released PISA assessment instrument – item structure and scoring
- Scoring students’ responses to PISA test items
- Constructing test items to assess students’ literacy related to different topics in the curriculum
- Peer sharing and critique on the test items constructed
Action research (Activity 2: School-based ‘PISA’ item design and online forum)

- After workshop session 1, participants of each school will design at least one thematic unit of assessment items.
- Interchange of ideas and queries with the workshop instructor and fellow participants will be enabled in an online forum.
- The instructor will assist the participants in the design process by discussing with them or endorsing their design.
- Participants will trial run their product with their own students, and write a summary of their experience and analysis on the performance of the items (in relation to their students and literacy, etc.)
Action research
(Activity 3: Workshop - sharing session)

- Participants share their experience, ideas and findings, and give feedback to each other
- Participants further modify their design if necessary and resubmit to the instructor
- HKPISA Centre processes the submitted items to form the collection of PISA items for common use by participants. (The Centre may supplement the items with appropriate content e.g. theoretical background information to make it into a set of more comprehensive reference material.)
- With input from the workshop participants, HKPISA Centre select appropriate items (most likely 2 to 3 units) to submit to OECD PISA for consideration for inclusion in the international item bank
Web-based Feedback Channel

HKPISA School Data Enquiry System (SDES)

學校數據查閱系統

http://www.fed.cuhk.edu.hk/~hkpisa/sdes

Objective

• Provide ‘PISA schools’ with accumulated, longitudinal PISA data
• Support data-driven school planning and self-evaluation
HKPISA School Data Enquiry System

Content

• Student factors
  – Self-related Cognitions (e.g. self concepts, ...)
  – Personal Values & Attitudes
• Parent factors
  – Involvement at home in the child’s education
  – Participation in the school
• Literacy Performance in Reading, Math, and Science
• Data from 2009, 2006, 2003, 2000+
• (constructing for 2012 data)
For the General Public

• Leaflet, road show, and education program by EBM (Education Manpower Bureau) & RTHK (Radio Television Hong Kong)

• Inform the general public “How well does Hong Kong’s Education System Works” with
  1. Facts on our accomplishment and challenges
  2. Hints for Educators
  3. Hints for Parents
General Public - Result Leaflets and Newsletters

- Result Leaflets with Hints for Educators and Parents
Newsletters (3-4 times a year)

Topics:
- School with heart
- Resilient students
- Career aspiration
- Educational expectation
- ICT impact on students
- Digital Habit
For Researchers & Academics

- Special Issue in Educational Journal, Books

Special Issue on “Large-scale international assessment: Implications for educational policies and pedagogy”

(Deadline: 15 Aug 2014)
For Policy makers
For Policy makers & Researchers

Regional Reports, Policy Level-Thematic Reports & papers (selected)


For Policy makers & Researchers


International Conference for PISA
Workshops for International Scholars
Nurturing Young Scholars


Concluding Remarks

• Hk need a professional team to review PISA to assess the relevancy to the local context before we commit to the large scale assessment.

• A professional team of subject experts is the most important: they will review the items and evaluate the quality and relevancy of the assessment to the local curriculum & your students’ daily life experience.

• Connect the assessment with pedagogy and curriculum is essential is you want to make the project really make a difference on teaching and learning.

• My research team started from 6 experts (1 international assessment expert+ 2 policy analysis + 3 subject experts) to over 20 members now.
HKPISA Research Team (2012)

Principal Investigator
• Prof. Ho Sui-chu, Esther, Department of Educational Administration and Policy, CUHK

Project Advisor
• Prof. Lo Nai-kwai, Leslie, Director of Hong Kong Institute of Educational Research, CUHK
• Prof. J. Douglas Willms, University of New Brunswick, Canada

Project Leaders
• Prof. Chung Yue-ping, Department of Educational Administration and Policy, CUHK
• Prof. Tsang WK, Department of Educational Administration and Policy, CUHK
• Prof Wong HW, Department of Curriculum and Instruction, CUHK

Experts in Language Education
• Prof. Lau Kit-ling, Dinky, Department of Curriculum and Instruction, CUHK
• Prof. Man Ying-ling, Department of Chinese, Hong Kong Institute of Education
• Prof. Chun Ka-wai, Cecilia, Department of Curriculum and Instruction, CUHK
• Dr. Tong Choi-Wai, Quality School Improvement Project, HKIER, CUHK
• Prof. Man Yee-fan, Evelyn, Department of Curriculum and Instruction, CUHK
HKPISA Research Team (2012)

Experts in Mathematics Education and Problem Solving
- Prof. Au Kwok-keung, Department of Mathematics, CUHK
- Prof. Shiu Ling-po, Department of Educational Psychology, CUHK
- Prof. Tse Chi-shing, Department of Educational Psychology, CUHK
- Prof. Wan Yau-heng, Department of Mathematics, CUHK
- Dr. Lau Tai-shing, Chung Chi College, CUHK
- Mr. Wong Ka-lok, Faculty of Education, HKU
- Prof. Wong Ka-ming, Faculty of Engineering Technologies, North Glasgow College, UK

Experts in Science Education
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- Prof. Ng Pun-hon, Department of Curriculum and Instruction, CUHK
- Prof. Yip Din-yan, Department of Curriculum and Instruction, CUHK
- Mr. Lau Kwok-chi, Department of Curriculum and Instruction, CUHK

Experts in Policy Studies & Survey
- Prof. Chung Yue-ping, Department of Educational Administration and Policy, CUHK
- Prof. Lo Nai-kwai, Leslie, Director of Hong Kong Institute of Educational Research, CUHK
- Prof. Ho, Sui Chu, Department of Educational Administration and Policy, CUHK

+IT Expert Team in 2012-2015
Thank you!

Further information

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