



HK-PISA



鑑察香港教育質素：學生基礎能力國際研究計劃
*What does HK-PISA 2000 tell us about the Reading,
Mathematical and Scientific Literacy of our students?*

HK-PISA Research Team
November 28 2002

OECD/PISA Project

Western Europe

Austria
Belgium
Denmark
Finland
France
Germany
Iceland
Ireland
Italy
Luxembourg
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
United Kingdom

Asia/Pacific Rim

Australia
China
Hong Kong (SAR)
Indonesia
Japan
Korea
Thailand

Eastern Europe

Albania
Bulgaria
Czech Republic
Greece
Hungary
Latvia*
Lithuania
Poland
Romania
Russian Federation*

Americas & others

Argentina
Brazil
Canada
Chile
Israel
Mexico
Peru
United States





Basic Design

- **Age-based target population** (*15 year-olds*)
- **National samples** of 150 schools with 5,000 students
- Two hours of **testing time** for each student
- **Context questionnaires** for the students, parents and schools

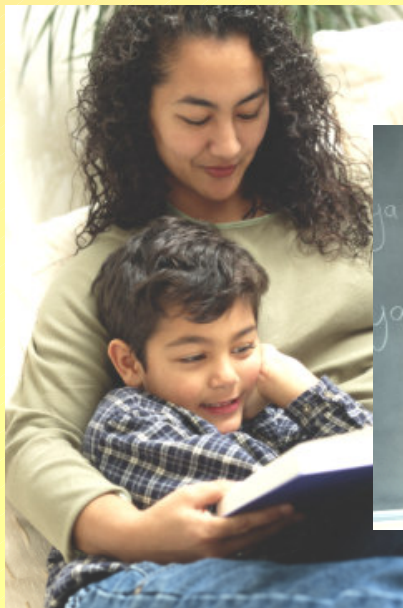


OECD/PISA

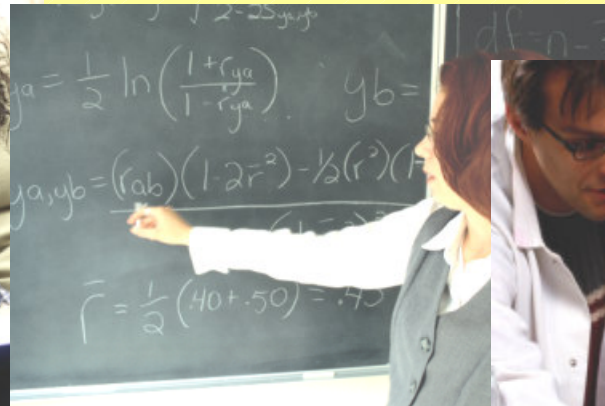


- Tests **competencies for real-life situations** *and* not constrained by the common denominator of national curricula
- Three Domains:**

Reading



Mathematics



Science





HKPISA



THE COLLABORATING PARTIES

INTERNATIONAL PARTIES

1. OECD
2. PISA CONSORTIUM

HONG KONG PARTIES

1. Hong Kong Institute of Educational Research (HKIER), CUHK
2. Education Department (ED) of HKSAR

Sponsored by Quality Education Fund



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SUBJECT EXPERT GROUPS 專家委員會

1. Expert Committee on Reading : 閱讀科專家委員會

Professor Shek Chun Ka Wai, Cecilia 石秦家慧教授

Professor Sze Man Man 施敏文教授

Professor Man Yee Fun, Evelyn 文綺芬教授

Professor Ho Wai kit 何偉傑教授

Professor Tse Shek Kam 謝錫金教授

2. Expert Committee on Mathematics : 數學科專家委員會

Professor Wong Ka Ming 黃家鳴教授

Professor Wong Ngai Ying 黃毅英教授

3. Expert Committee on Science: 科學科專家委員會

Professor Yip Din Yan 葉殿恩教授

Professor Cheung Sin Pui 張善培教授

4. Expert Committee on Problem Solving : 解難專家委員會

Professor Lam Chi Chung 林智中教授

Professor Chiu Ming Ming 趙明明教授

Total Number of Schools Participated

Explicit Strata	Implicit Strata	Total Number of Schools in Hong Kong	Number of Schools for OECD
Government	High Ability	18	7
	Medium Ability	8	2
	Low Ability	10	4
	Subtotal	36	13
Aided	High Ability	127	46
	Medium Ability	130	44
	Low Ability	101	29
	Subtotal	358	119
Independent	Local (DSS)	23	6
	International	23	2
	Subtotal	46	8
	Total	440	140



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Distribution of Grade Levels

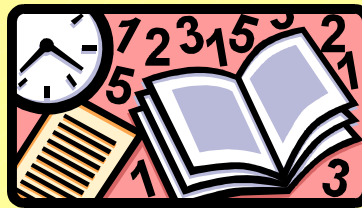
Grade	Frequency	Percentage
Form 1	135	3.1
Form 2	280	6.4
Form 3	524	11.9
Form 4	2695	61.2
Form 5	767	17.4
Form 6	4	0.1
Total	4405	100%

Learning Performance of 15-year-old students in Hong Kong

Reading
Literacy

Mathematics
Literacy

Science
Literacy

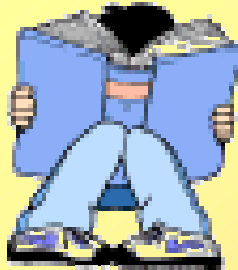


Interest in

Self-concept

Reading & Mathematics

Reading & Mathematics





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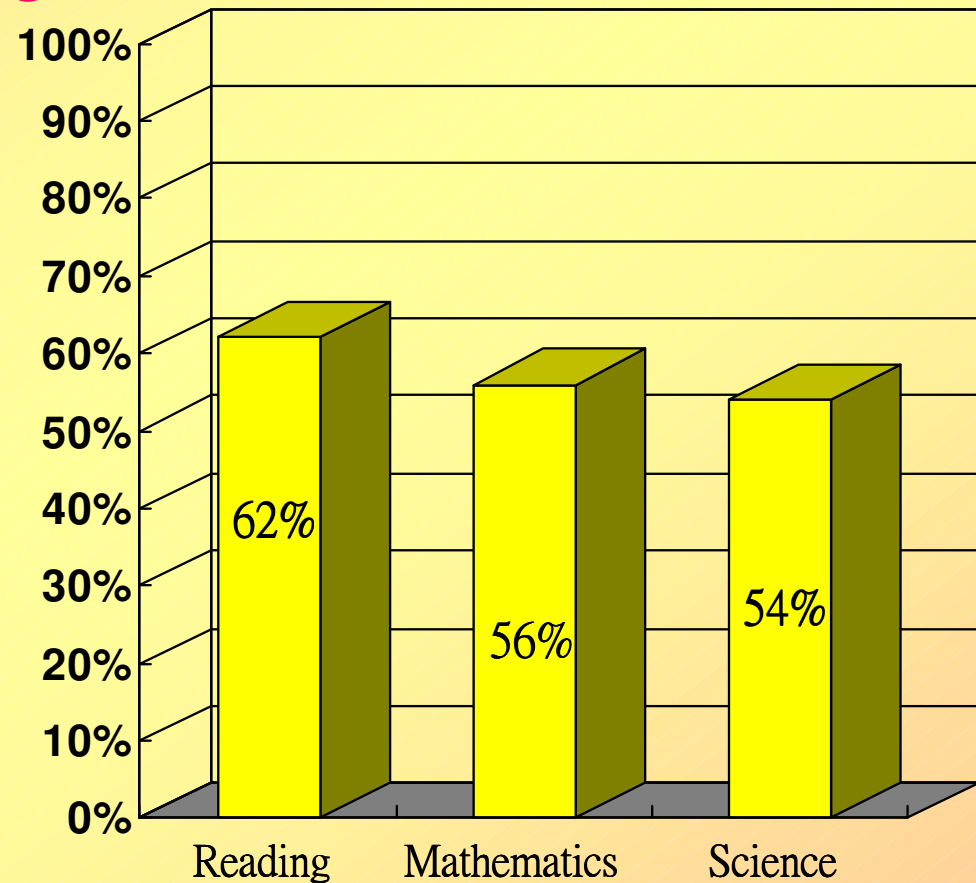
Test Language: **Chinese**

Main Study

Test Date: Jan - Feb 2002

Average scores of the 4880 students (n=140 schools):

Reading	62%
Mathematics	56%
Science	54%



Note: The cross-nation comparison of student achievement is available in June, 2003.



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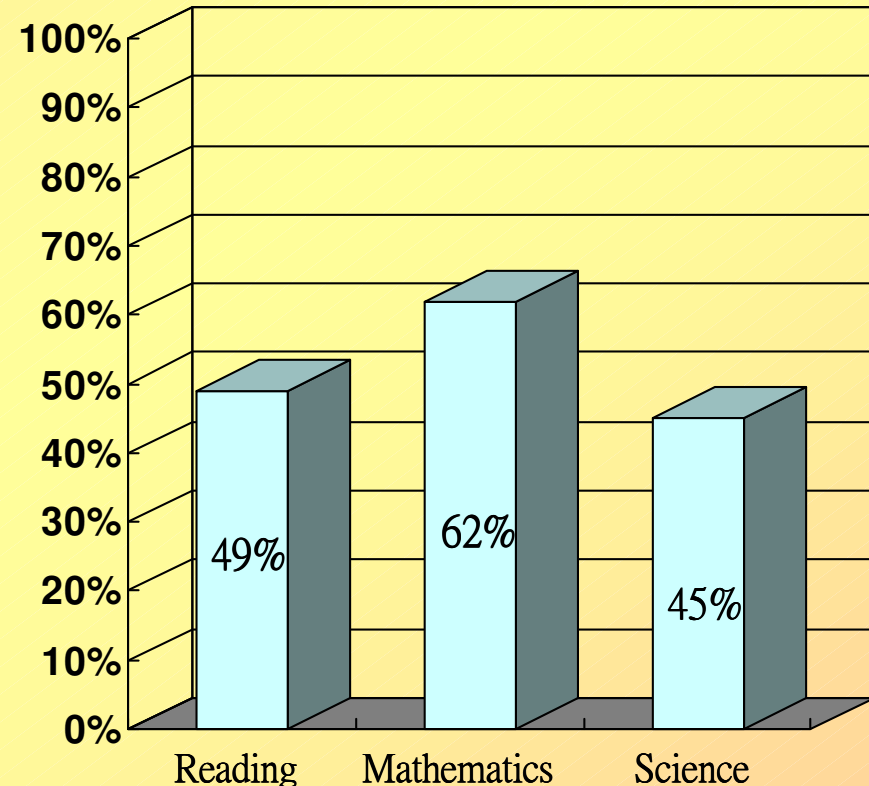
Test Language: **English (EMI & International schools only)**

Main Study

Test Date: Jan-Feb 2002

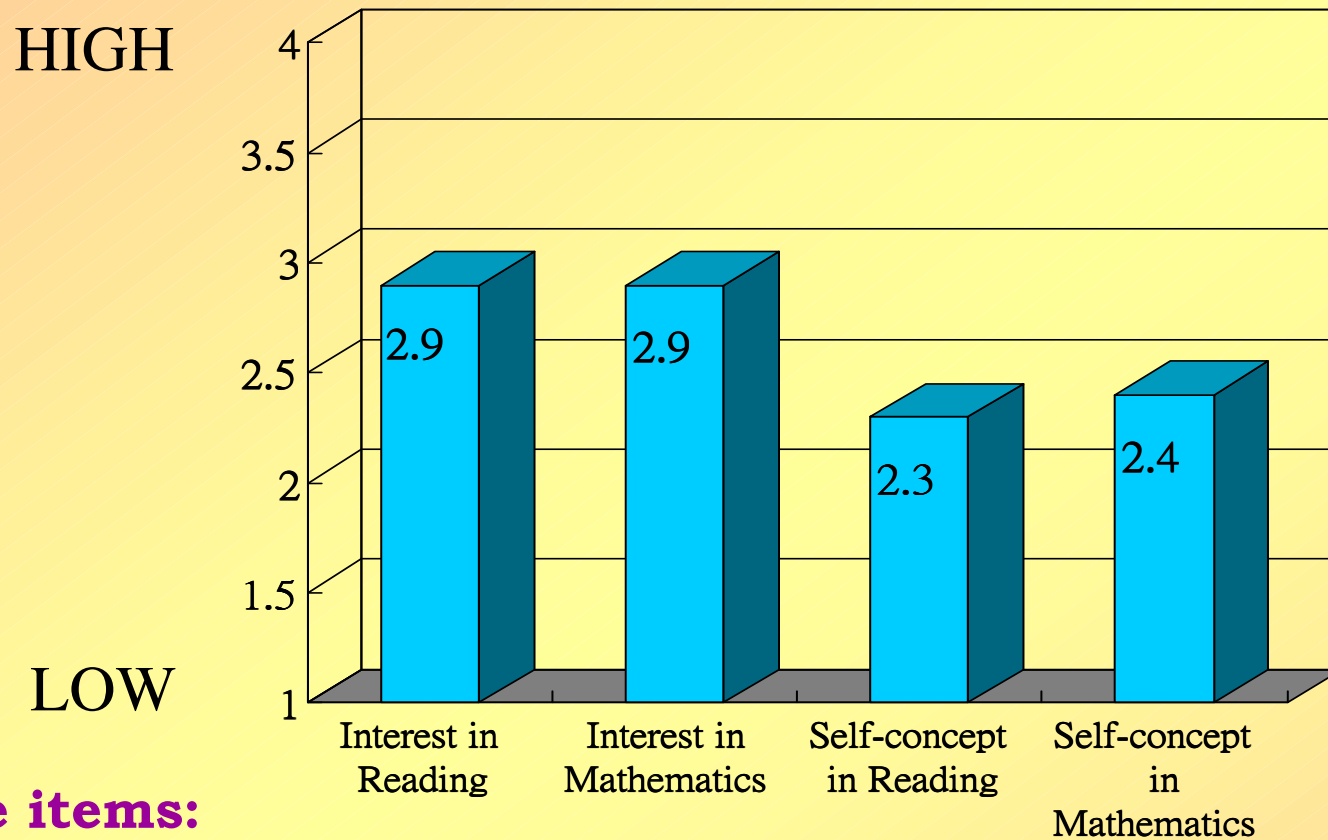
Average scores of the 1304 students (n=40 schools):

Reading	49%
Mathematics	62%
Science	45%



Note: The cross-nation comparison of student achievement is available in June, 2003.

Interest and Self-concept in Reading and Math

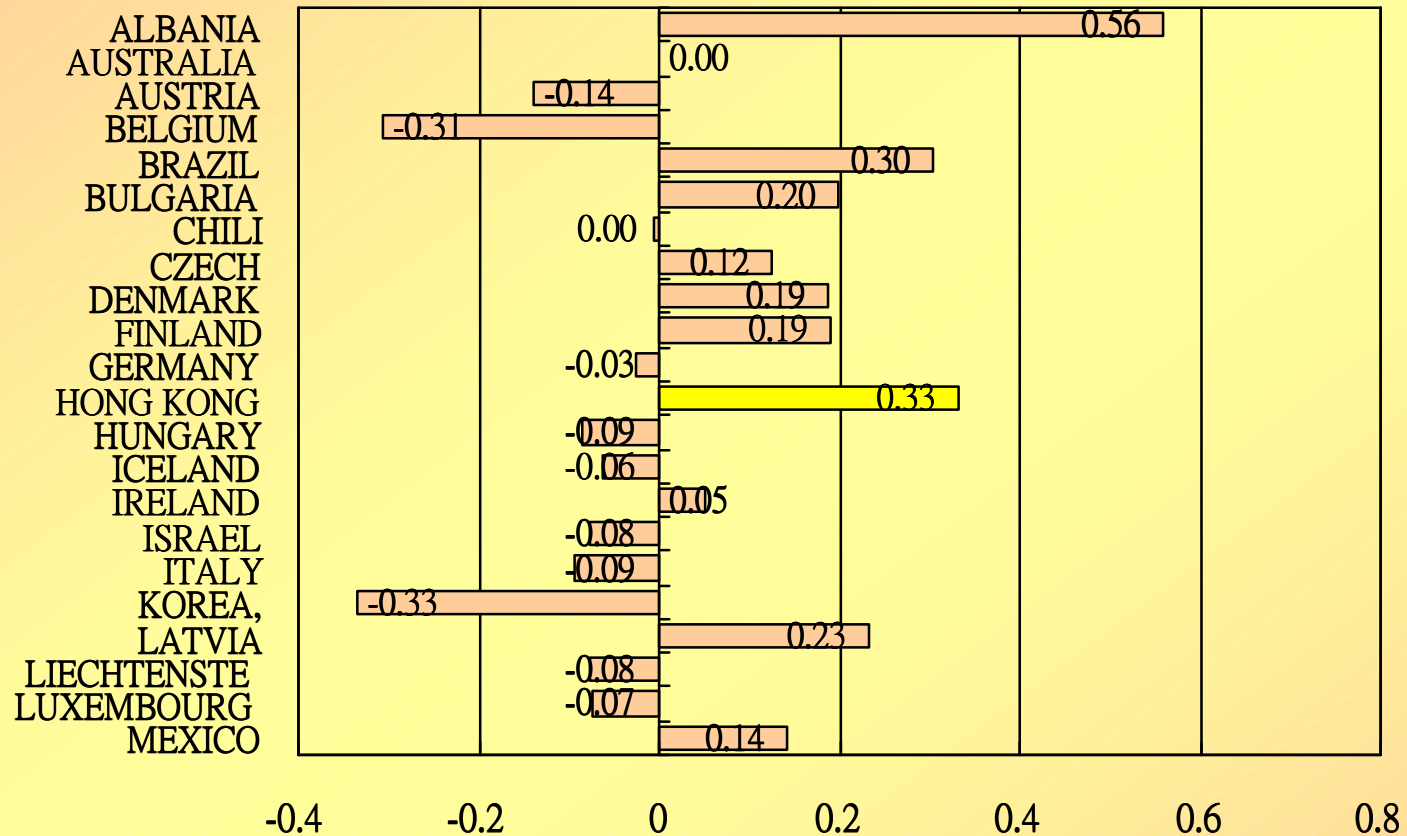


Sample items:

Interest: When I read(do math), I sometimes get totally absorbed.

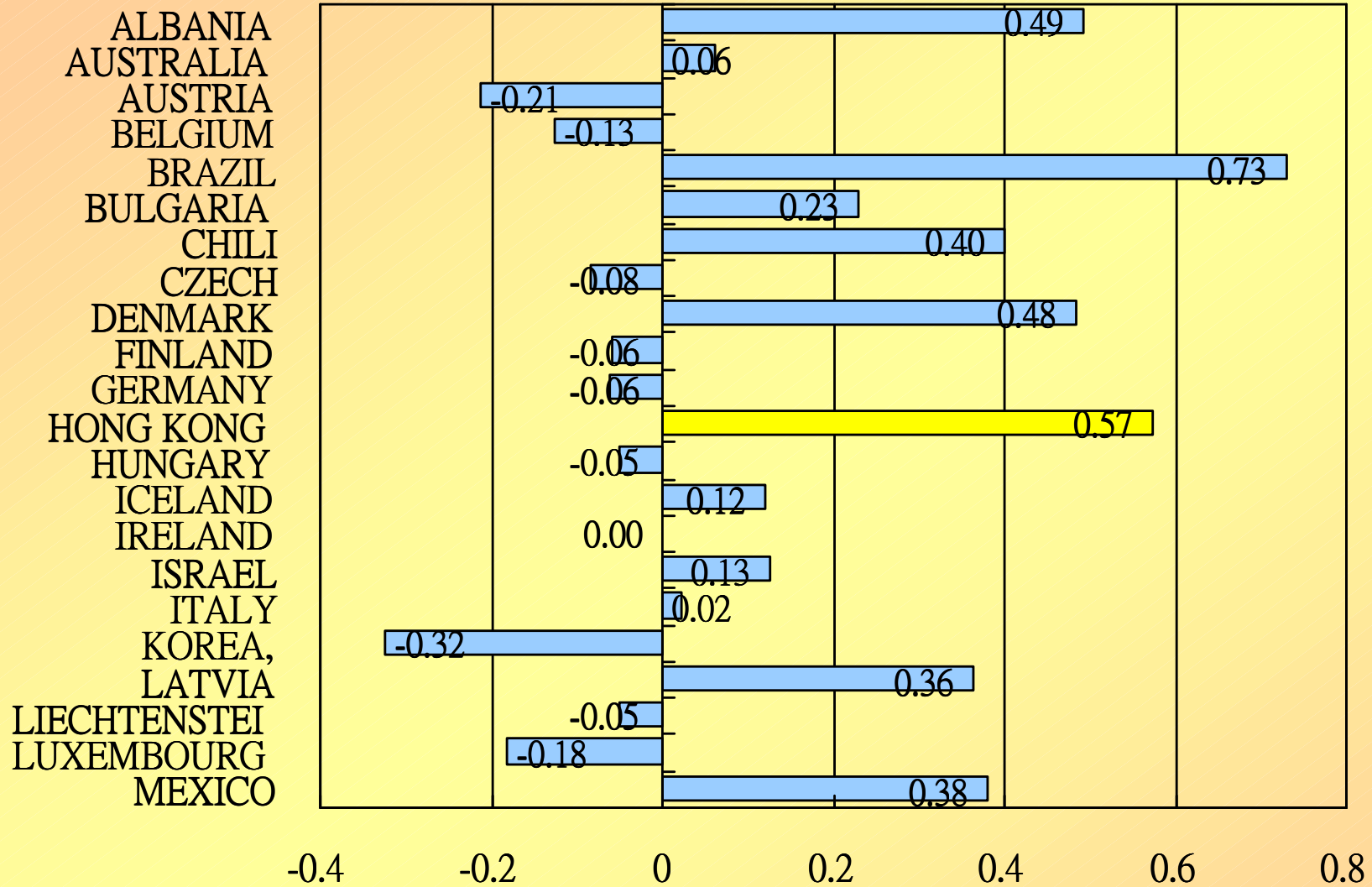
Self-concept: I learn quickly in the (Chinese/English)/Math class.

Interest in Reading



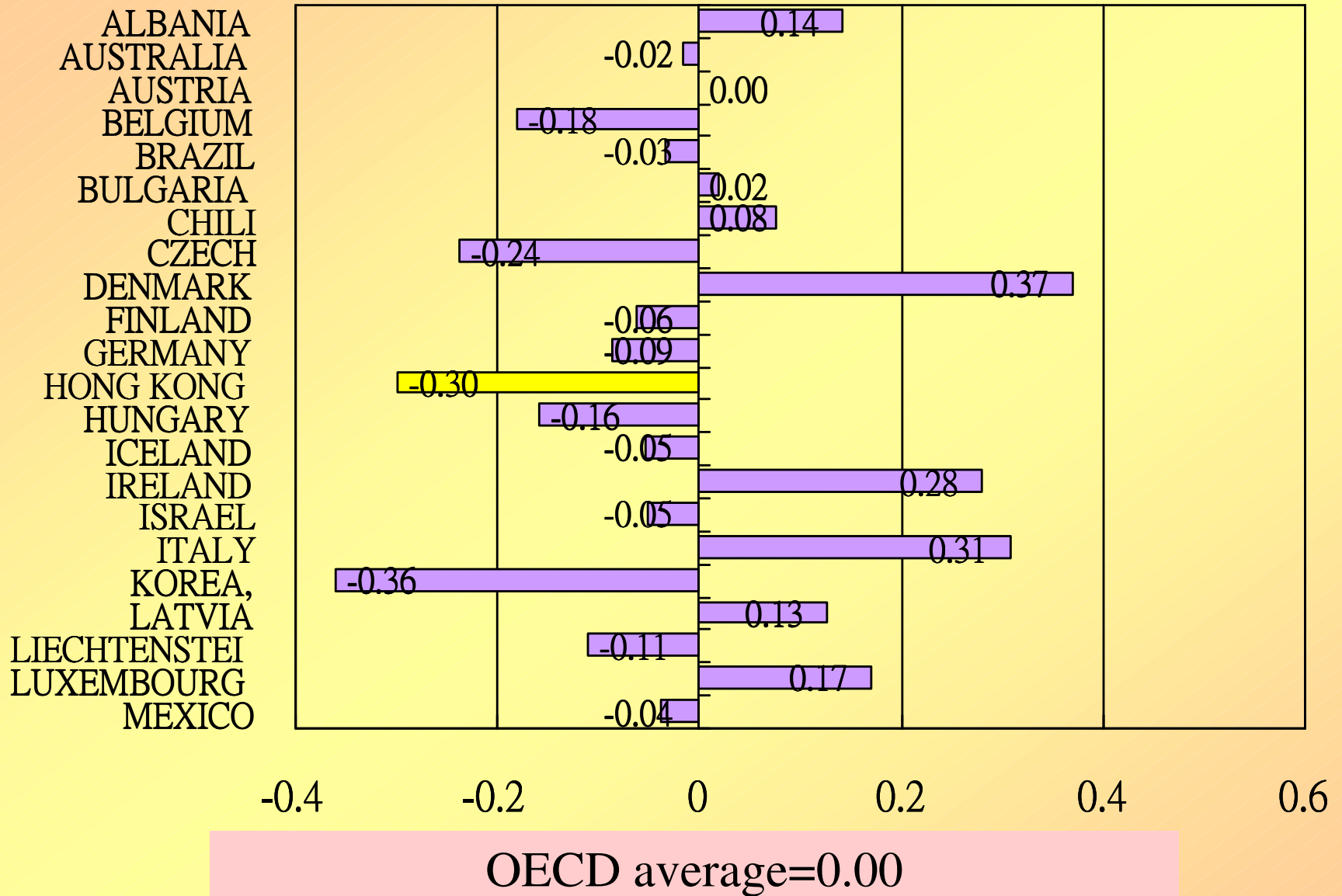
OECD average=0.00

Interest in Mathematics

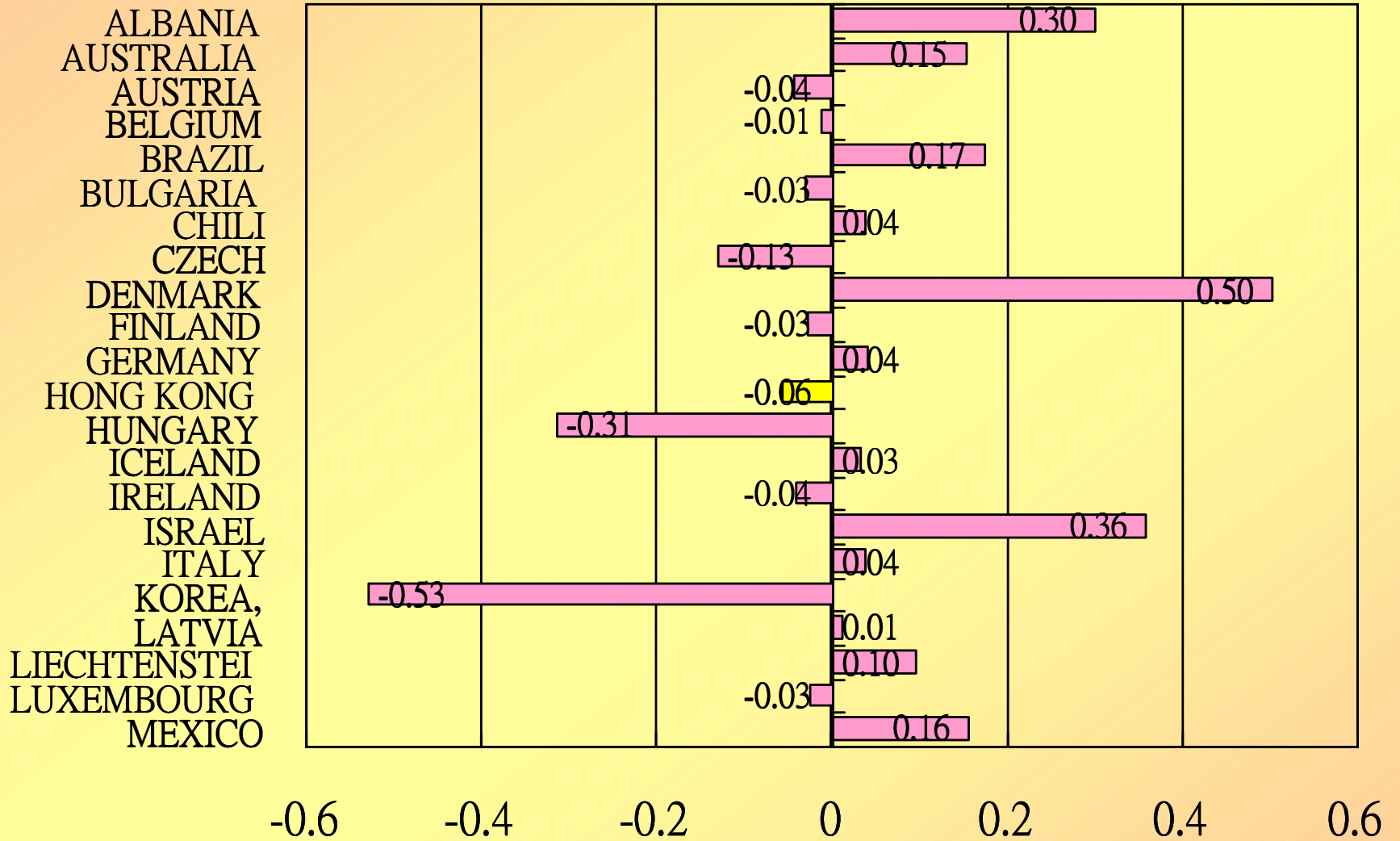


OECD average=0.00

Self-concept in Reading

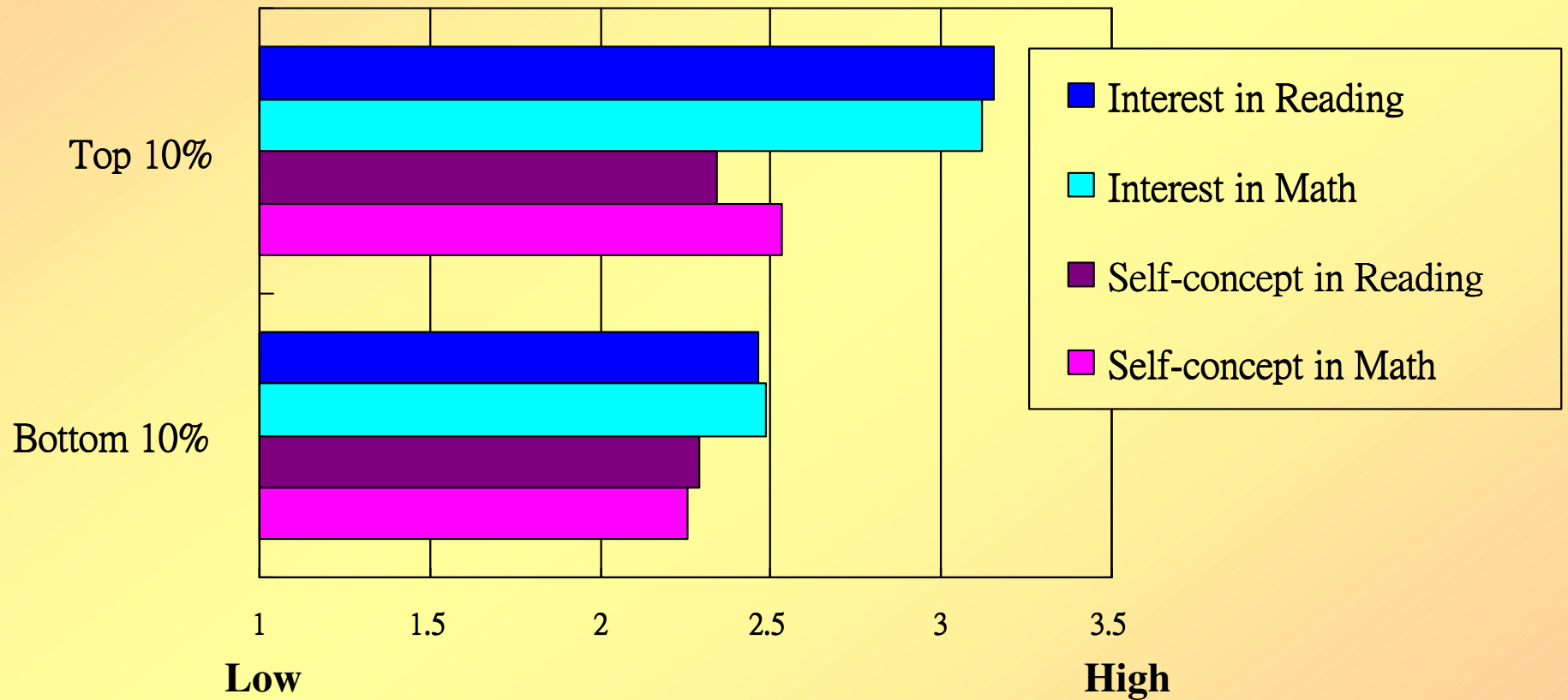


Self-concept in Mathematics

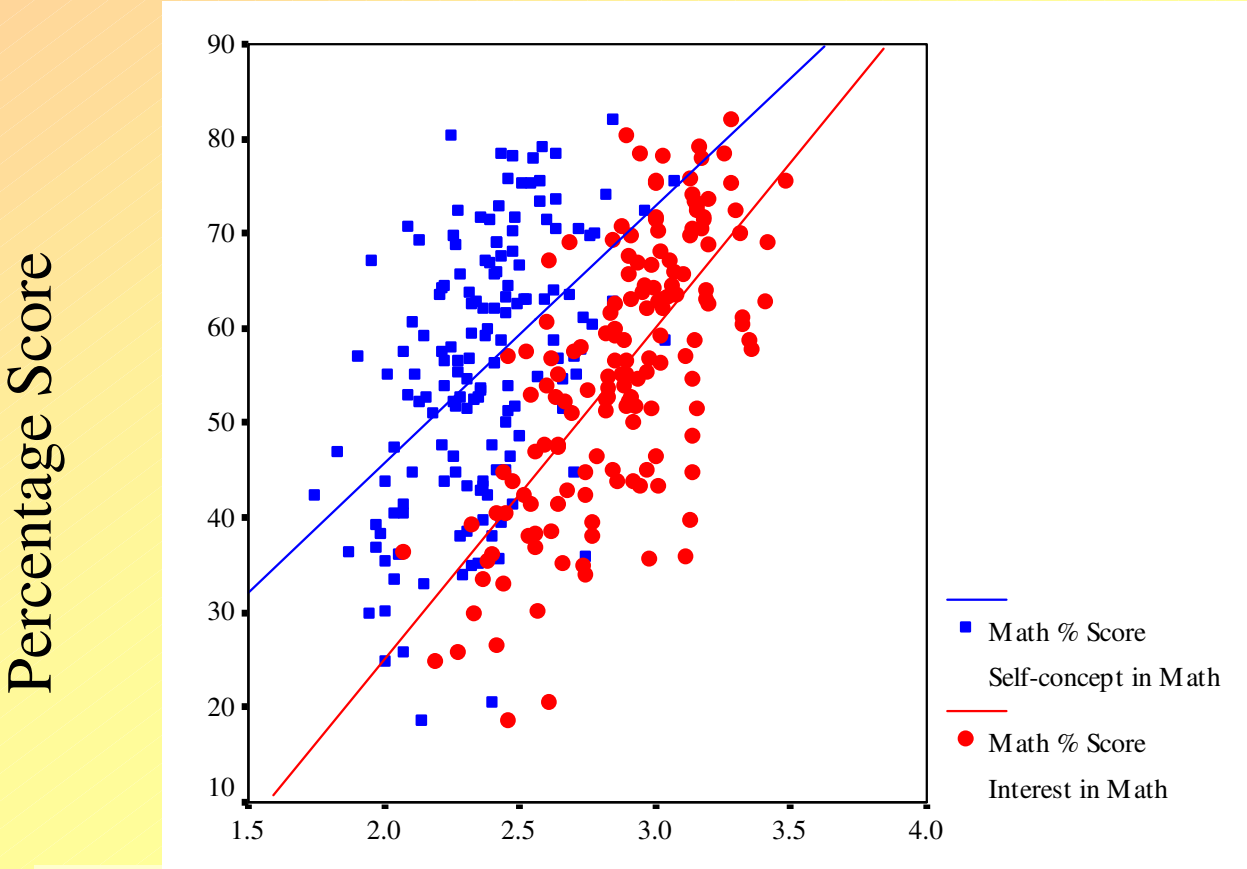


OECD average=0.00

Learning Attitude of 15-year-old students in Hong Kong

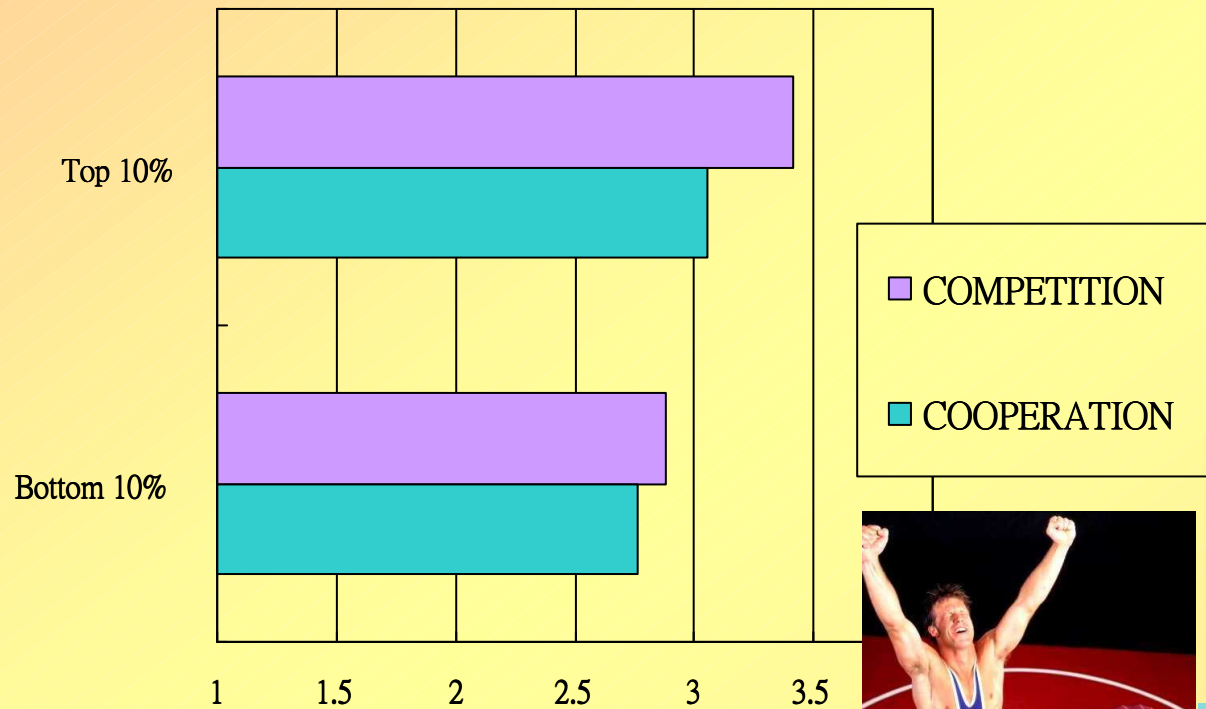


School Mean Literacy vs Self-concept & Interest



Low ← → High

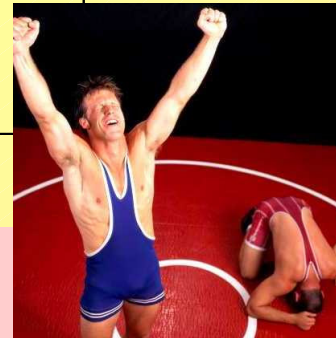
Competition and Cooperation Strategies



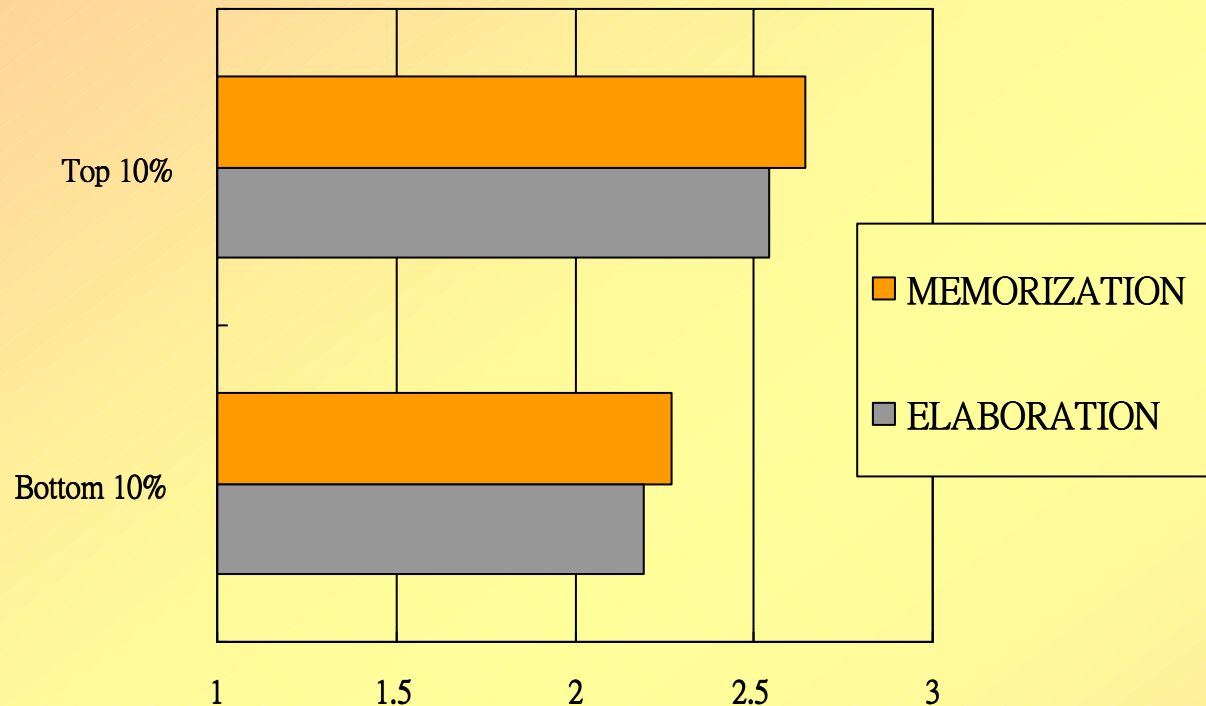
Sample items:

Competition: I like to try to be better than the others.

Cooperation: I like to work with other students



Memorization and Elaboration

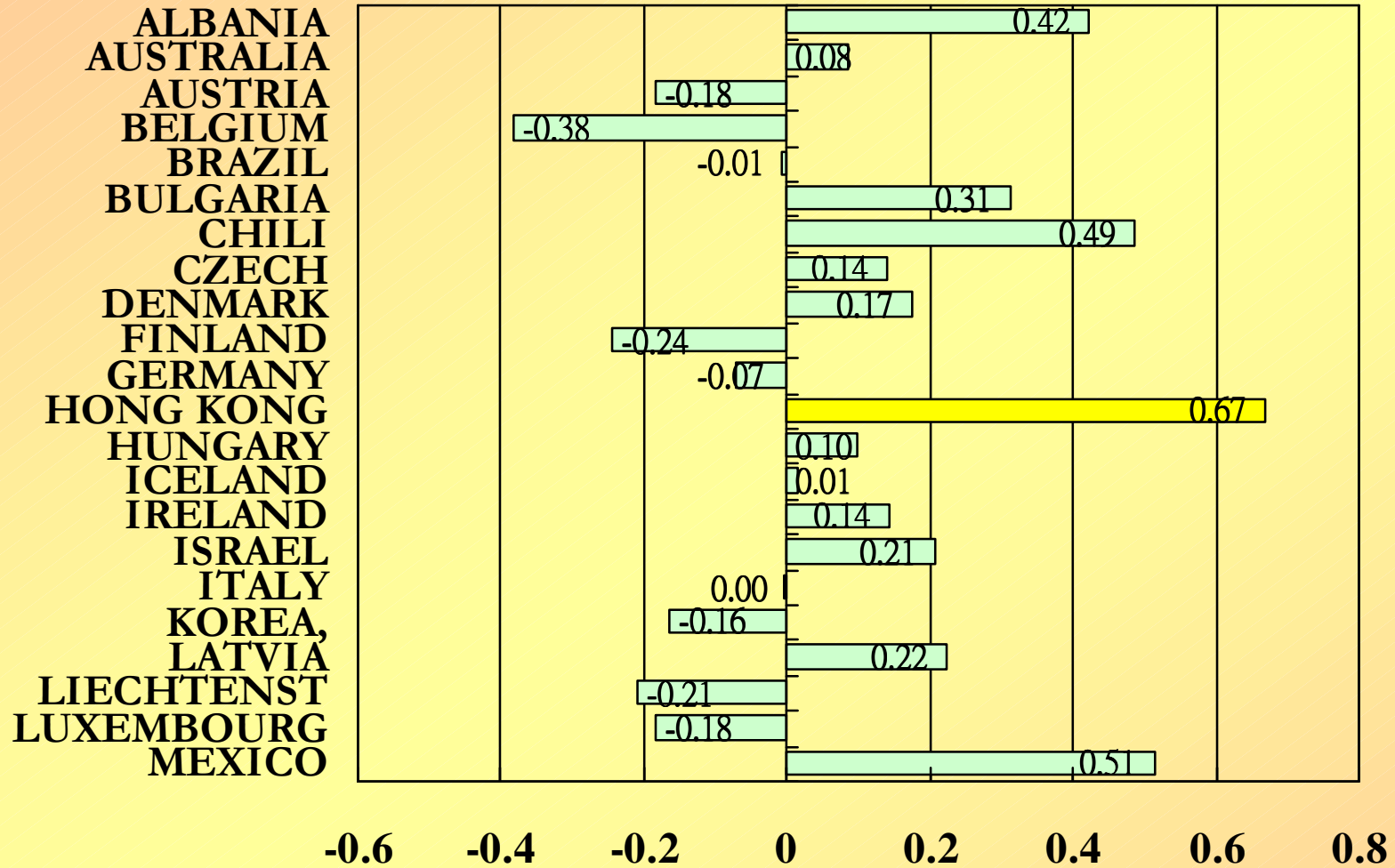


Sample items:

Memorization: I memorize all new materials so that I can recite it.

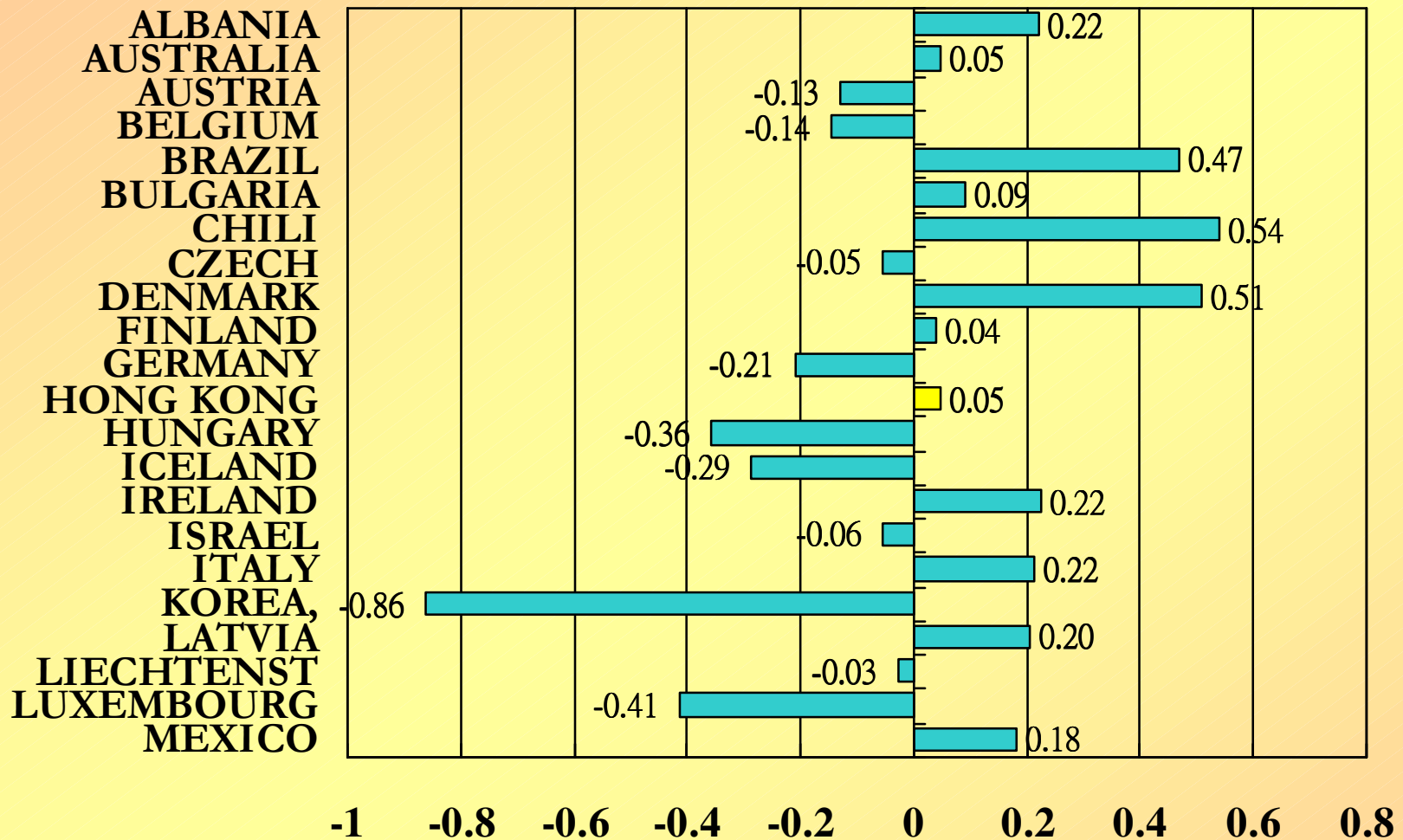
Elaboration: I try to relate new material to things I have learned in other subjects.

Competitive Learning



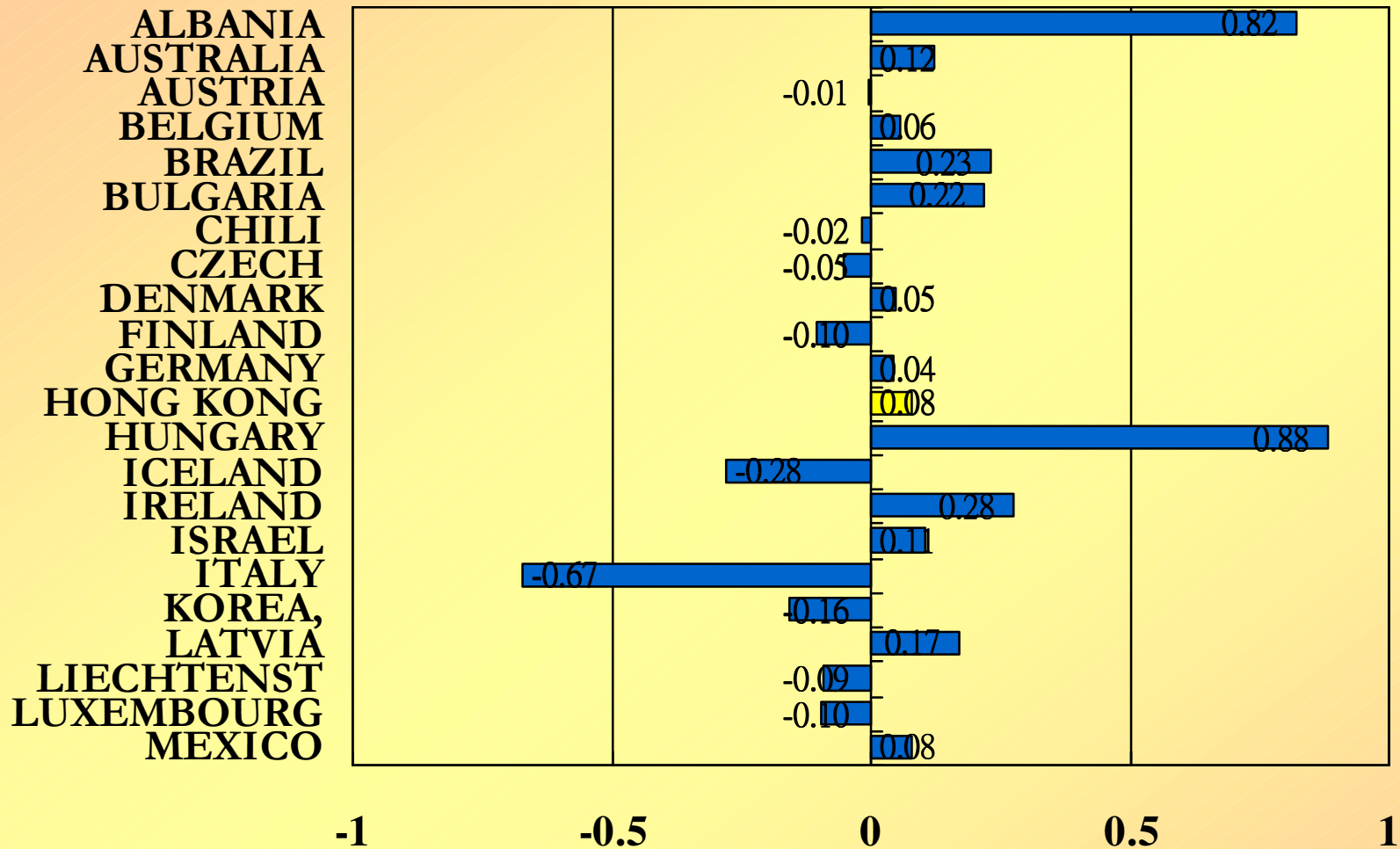
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Collaboration Learning



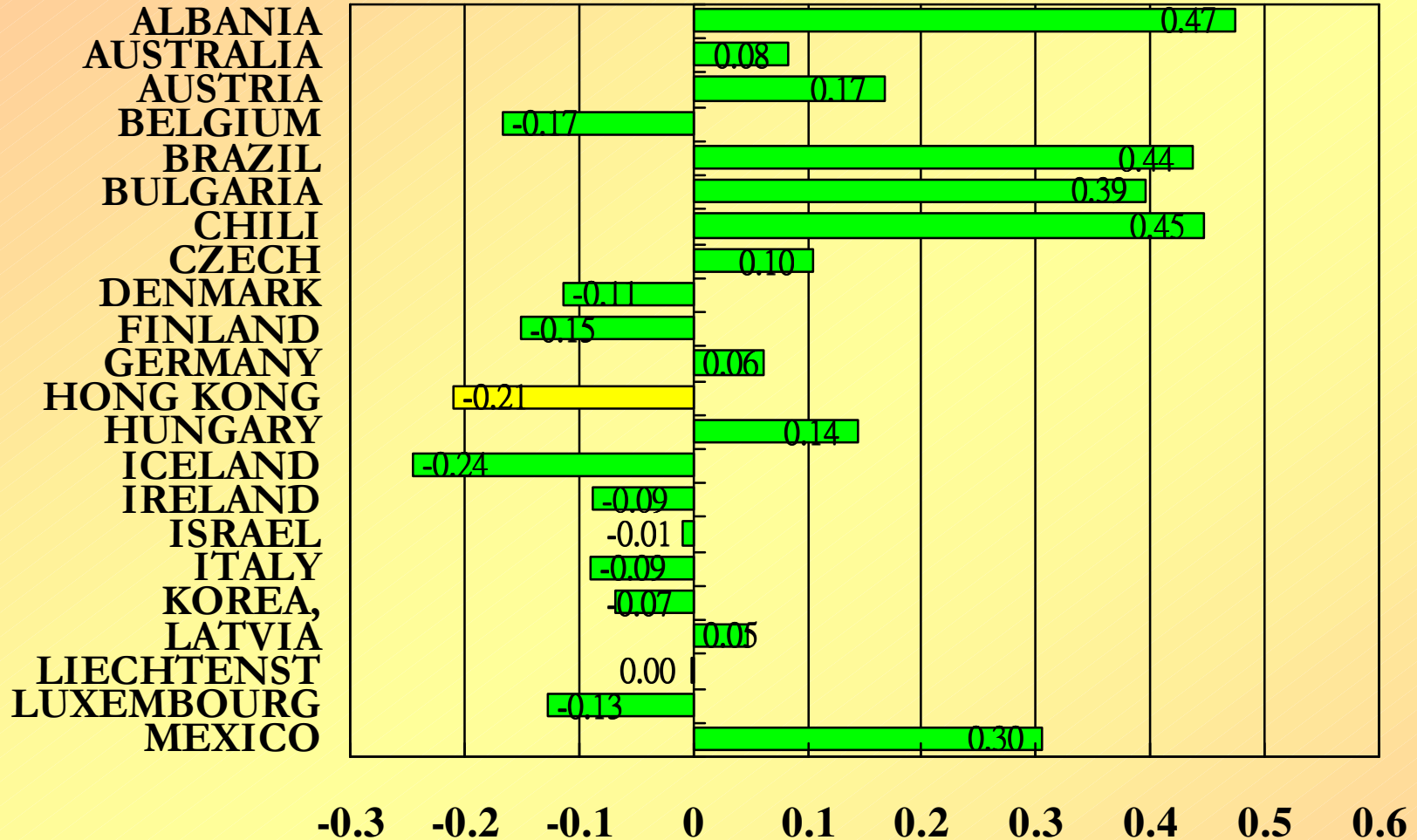
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Memorization



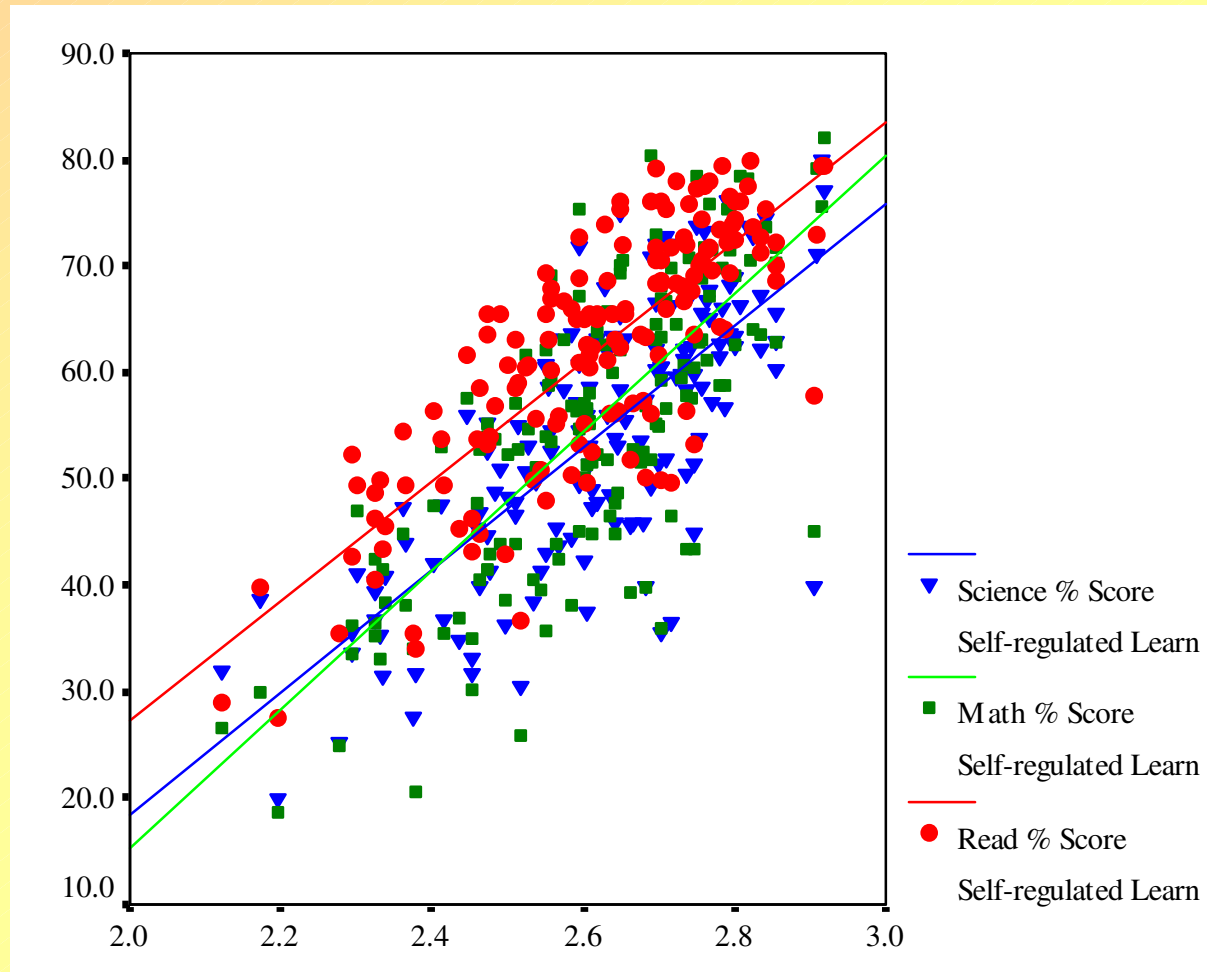
OECD average=0.00

Elaboration Strategies

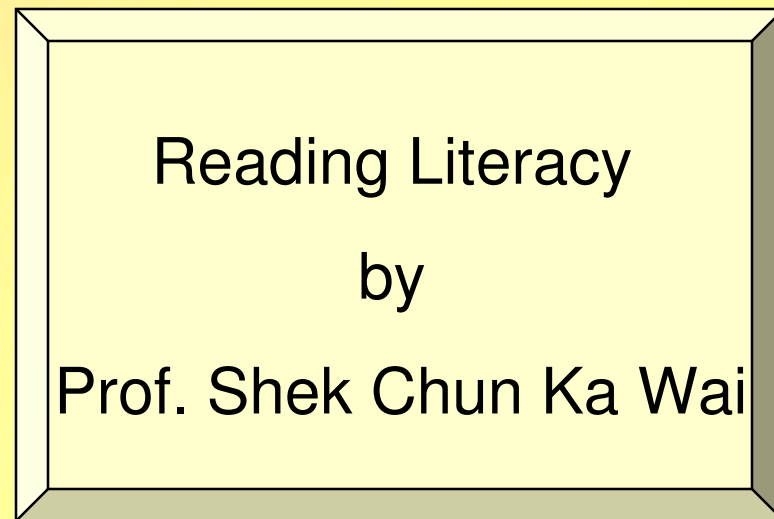


OECD average=0.00

School Mean Literacy vs Self-regulated Learning Index



Reading Literacy



Reading Literacy

by

Prof. Shek Chun Ka Wai

Scientific Literacy

Scientific Literacy

by

Prof. Yip Din Yan

Mathematics Literacy

Mathematics Literacy

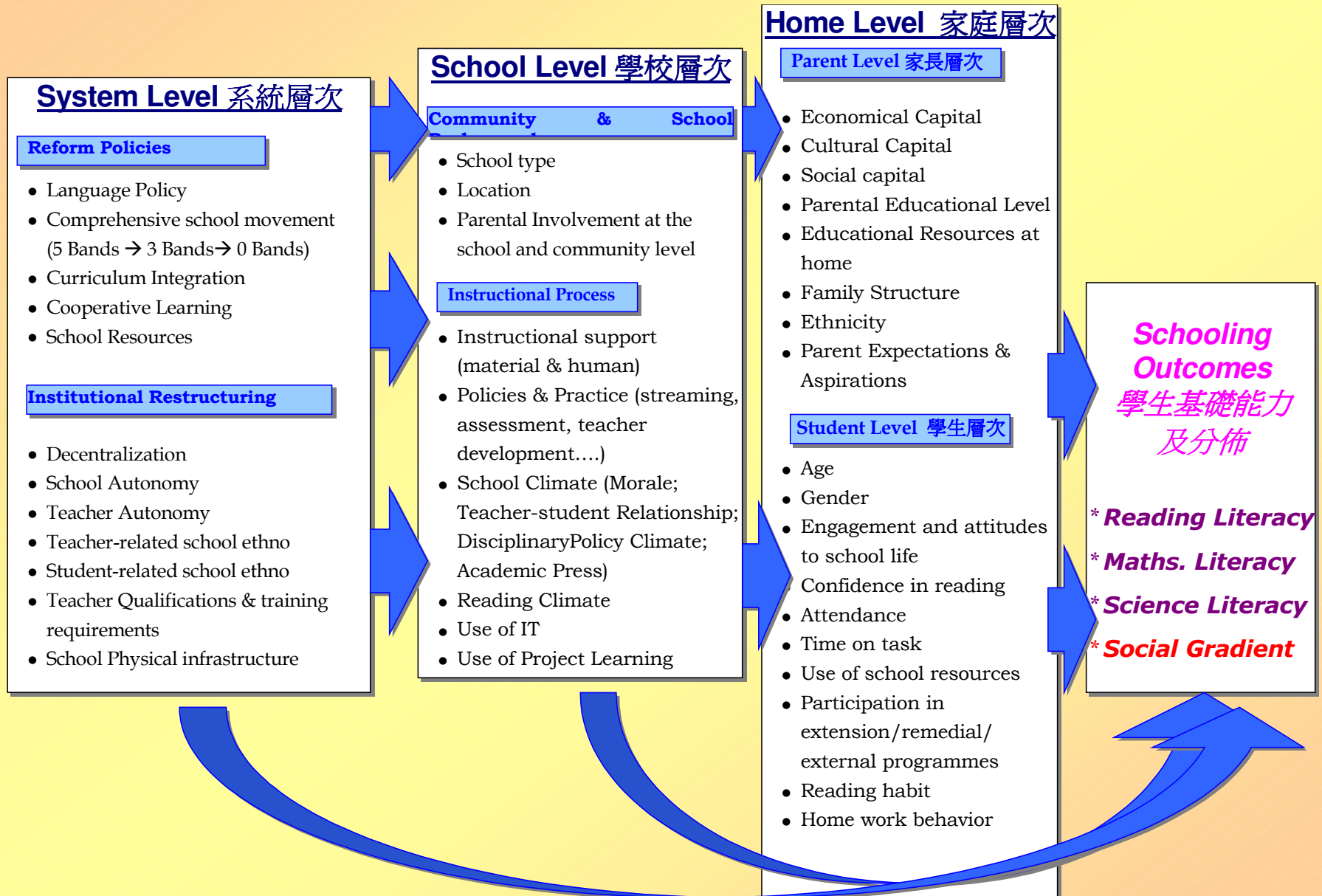
by

Prof. Wong Ka Ming



**How to Interpret
Your School
Report**

Conceptual Framework of the HK-PISA Project 理念架構





HK-PISA Project



HK-PISA Quality Indicators

- 1. Basic indicators** - A baseline profile of the competencies of students in reading, mathematics and sciences
- 2. Contextual indicators**-Analyses that identify key demographic, social, economic and educational determinants of student and school performance
- 3. Indicators on trends** designed to assess the effectiveness of educational reform policies



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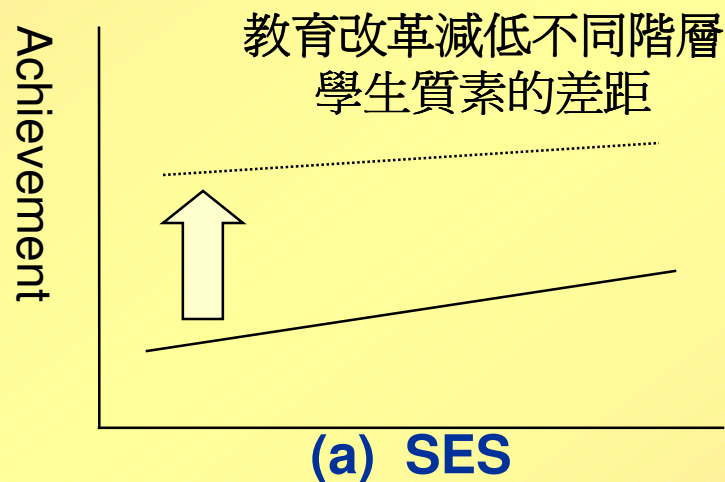
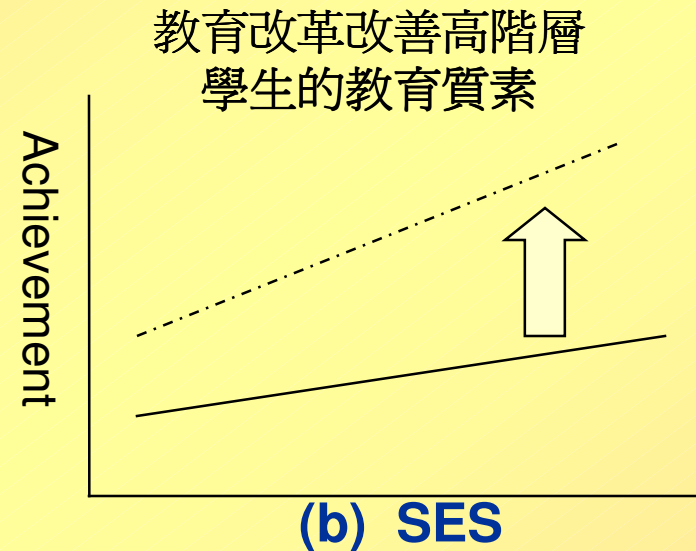
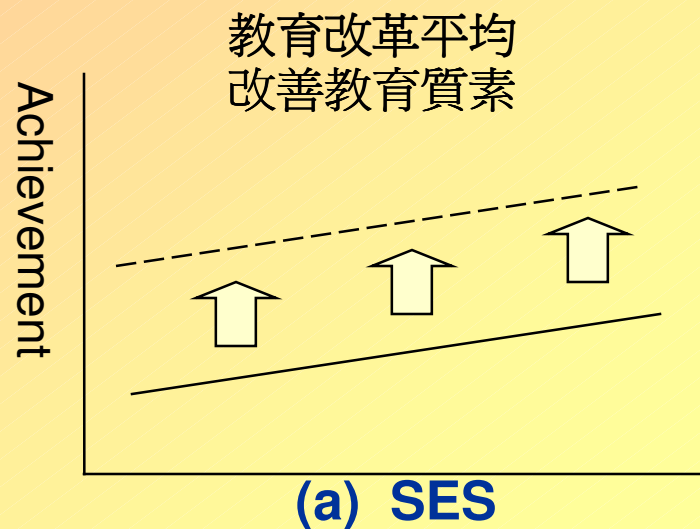


Figure 2. A social policy with positive effects could (a) raise outcome levels evenly across the SES distribution, (b) raise outcomes more for those with high SES than for those of low SES, or © raise outcomes more for those low SES than for those of high SES.



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Looking forward...

- First Cycle International Report of PISA2000, June 2003
- Second Cycle Main study of PISA 2003 May- July 2003
- Third Cycle, Main study of PISA 2006



HK-PISA Center



Thank you !

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Visit the websites:

OECD-PISA : www.pisa.oecd.org
HK-PISA: www.fed.cuhk.edu.hk/~hkpisa