



香港教育大學

The Education University  
of Hong Kong

# Tackling Educational Inequalities: Challenges & Actions

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(趙永佳)

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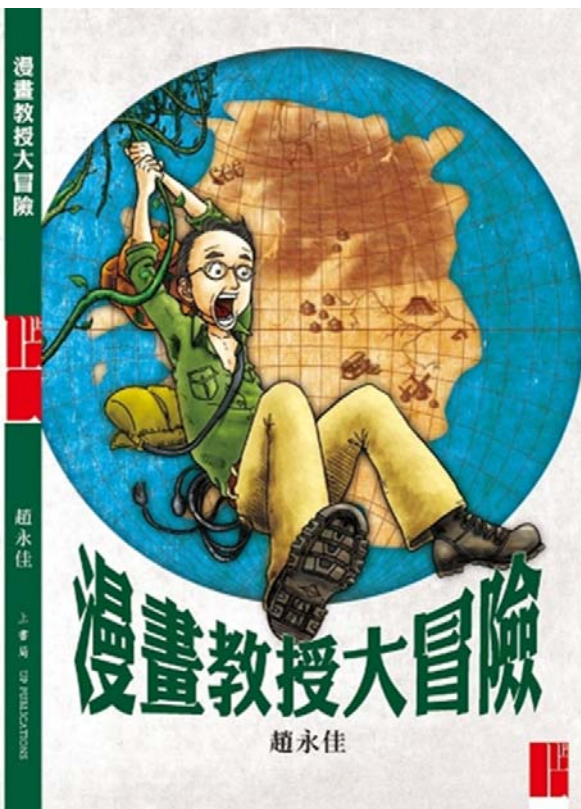
The Academy of Hong Kong Studies,

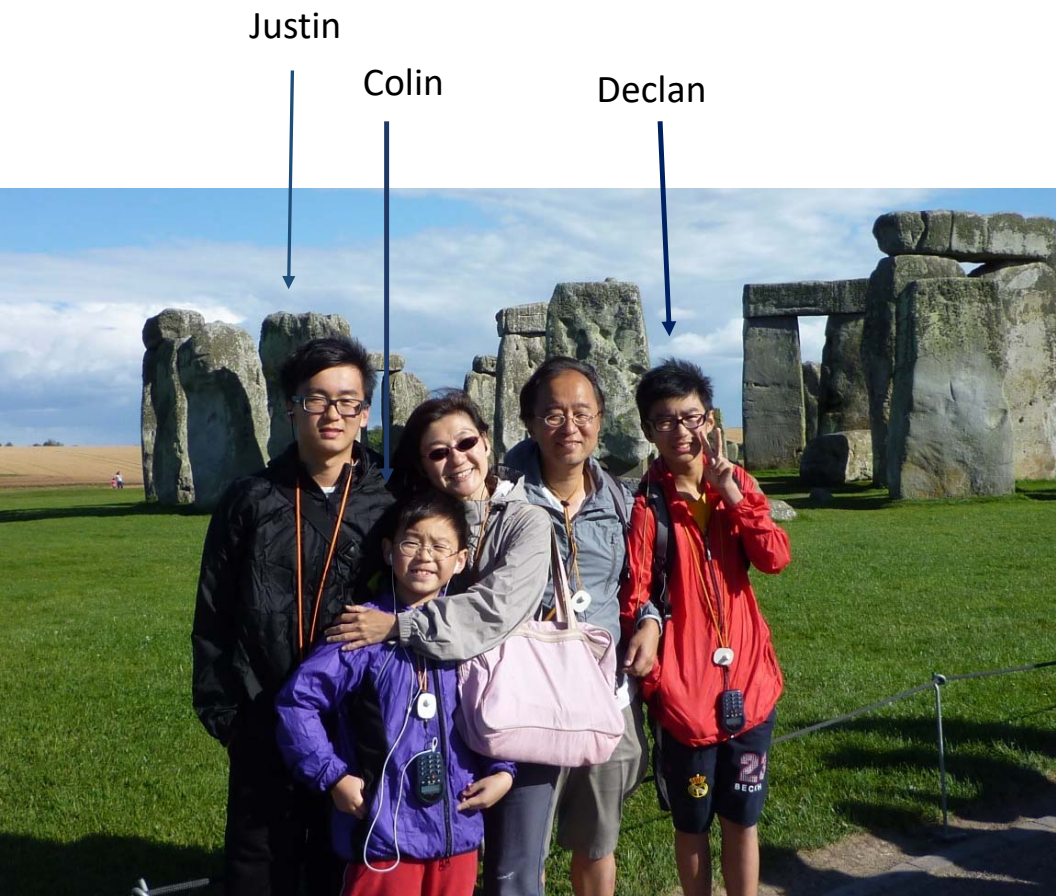
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# Who am I?

- Baby boomer who was born and brought up in a typical working class Hong Kong family.
- Secondary: St Bonaventure College, AL: Methodist College.
- Undergraduate / MPhil – HKU Sociology
- PhD – Princeton University Sociology
- CUHK (1990-2017), Co-director, Institute of Asia-Pacific Studies, Professor, Sociology
- EdUHK (August 2018) Chair Professor of Sociology; Co-director, Academy of Hong Kong Studies; Associate Dean (International Engagement), Faculty of Liberal Arts and Social Sciences.
- Chair, 2009-2017, HKEAA-EDB One Committee of Liberal Studies.
- Research Interest: Hong Kong Studies, Social Inequality, School to Work Transition, Youth Studies, Liberal Studies, National Identity, Chinese Medicine, Popular Culture and Film Industry.





- Father of Three
- (1) Justin: Private (P1), DSS (P2-5), ESF (Yr 6-10), Singapore (F4-7), HKU (Year 2)
- (2) Declan: DSS (P1-2), Gaia School (P3-4), Subsidized (P5), ESF (Yr 6-13), Academy of Calargy in Arts and Design (Year 1).
- (3) Colin: Subsidized (P1-6, 3 schools), Gap year, DSS (F1-2).

# Challenges of Educational Inequalities in HK

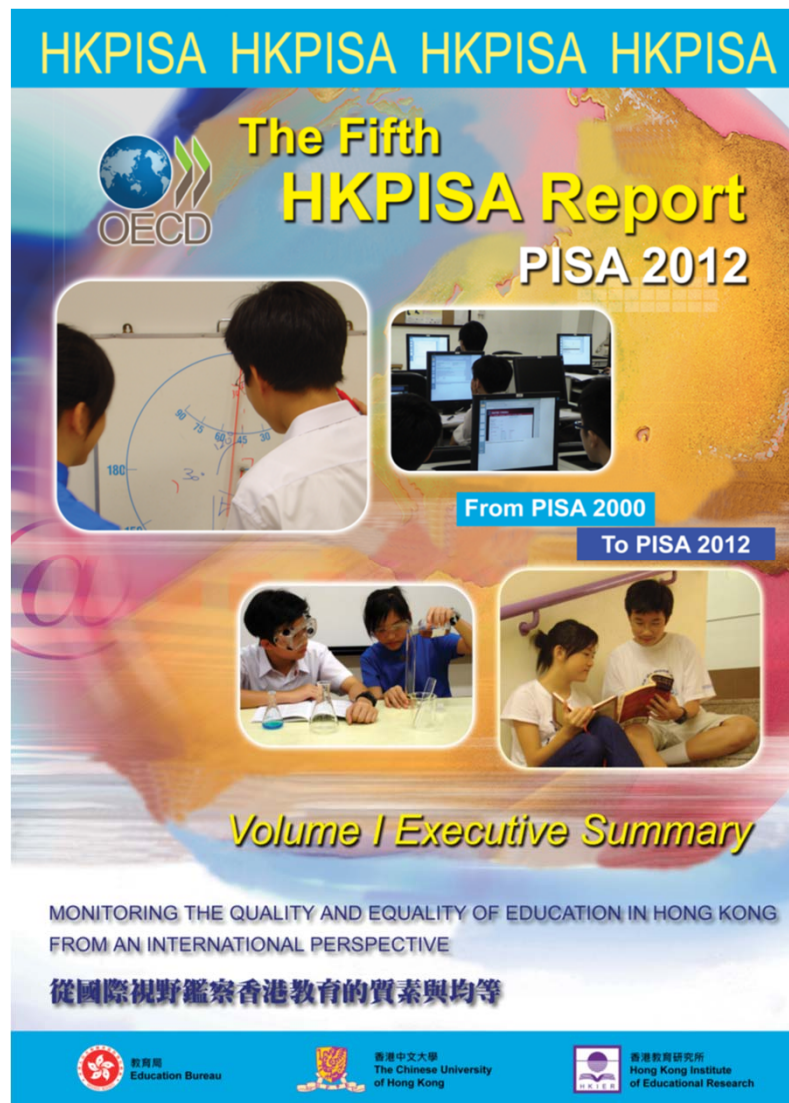
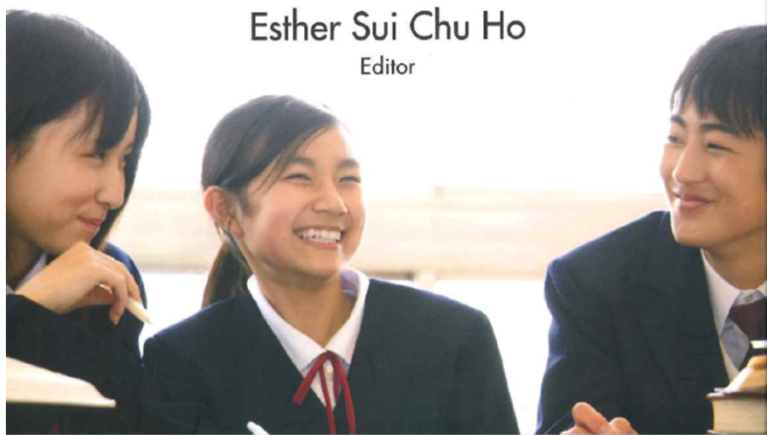
- How unequal is Hong Kong education?
- Evidence from PISA
- “The Programme for International Student Assessment (PISA) is a worldwide study by the Organisation for Economic Co-operation and Development (OECD) in member and non-member nations intended to evaluate educational systems by measuring 15-year-old school pupils' scholastic performance on mathematics, science, and reading.”



# What We Learned from PISA

The Outstanding Performance of  
Students in Hong Kong and East Asia

Esther Sui Chu Ho  
Editor



**Table 2 Number of Participating Schools of the PISA 2012 Main Study in Hong Kong**

Explicit Strata	Implicit Strata	Total Number of Schools	Number of Participating Schools
Government	High Ability	15	6
	Medium Ability	8	2
	Low Ability	7	2
	N/A	1	0
Aided	High Ability	120	46
	Medium Ability	117	40
	Low Ability	126	33
	N/A	1	0
Independent <sup>#</sup>	Local (DSS*)	55	16
	International	32	3
<b>Total</b>		<b>482</b>	<b>148</b>

<sup>#</sup>There is no implicit stratification for independent schools.

\*DSS refers to schools under the Direct Subsidy Scheme.

**N = 4670**

Source: The Fifth PISA Report Vol 1. p.2.

**Table 1: Comparison of Between-School Variance in Performance in  
Mathematics, Science and Reading of Hong Kong from PISA 2000+ to PISA 2012.**

	Reading		Mathematics		Science	
	Total Variance in Performance	Percentage of Total Variation between Schools (%)	Total Variance in Performance	Percentage of Total Variation between Schools (%)	Total Variance in Performance	Percentage of Total Variation between Schools (%)
PISA2000	7056	48.30	8836	45.10	7225	44.90
PISA2003	7016	42.20	9946	46.60	8766	45.40
PISA2006	6618	39.60	8638	39.81	8381	36.50
PISA2009	7058	44.50	9083	45.70	7635	43.80
PISA2012	7225	41.60	9275	42.31	6889	36.50

*Source: Ho (2017). What we learned from PISA?*

**Table 3ABC: Variation in Performance between & within Schools**

Economy	PISA 2015 Science Performance			PISA 2012 Mathematics Performance			PISA 2009 Reading Performance		
	Total Variance as a Proportion of OECD Average %	Between School Variance %	Within School Variance %	Total Variance as a Proportion of OECD Average %	Between School Variance %	Within School Variance %	Total Variance as a Proportion of OECD Average %	Between School Variance %	Within School Variance %
<b>HK</b>	<b>72.4</b>	<b>22.2</b>	<b>49.7</b>	<b>109.4</b>	<b>46.3</b>	<b>62.9</b>	<b>81</b>	<b>36.3</b>	<b>50.3</b>
Japan	97.4	42.1	53.8	103.2	54.5	48.3	116	58.7	62.2
OECD	100	30.1	69	100	36.9	63	100	42	65
Korea	101.0	24.9	75.4	115.8	45.3	69.1	72	31.6	61
Finland	103.2	8	93.4	85.8	6.3	77.0	86	7.7	80.7
US	108.5	20.7	87.3	95.2	22.6	72.7	108	42	74.8
Taipei	110.5	40.0	70.1	157.6	66.2	90.9	86	32	67
UK	110.8	24.3	85.9	105.4	29.7	75.7	105	32	77.2
Singapore	119.7	41.6	78.1	130.9	48	82.9	110	39.1	71.5

Source: Ho (2017) *What We Learned from PISA?*



**Table 5: Comparison of Literacy Scores between Hong Kong and OECD Average by Immigration Status in PISA 2012.**

Economy	Mathematics			Science			Reading		
	Native Mean	Second Generation Mean	First Generation Mean	Native Mean	Second Generation Mean	First Generation Mean	Native Mean	Second Generation Mean	First Generation Mean
HK	566	569	543	559	563	539	546	554	534
OECD	500	467	461	508	470	456	502	473	461

Source: Ho (2017) *What We Learned from PISA?*

**Table 7ABC: Percentage of the Variation in Performance  
Explained by Students' and Schools' ESCS.**

Economy	PISA 2015 Science Performance		PISA 2012 Mathematics Performance		PISA 2009 Reading Performance	
	Between School Variance %	Within School Variance %	Between School Variance %	Within School Variance %	Between School Variance %	Within School Variance %
<b>HK</b>	<b>40.9</b>	<b>0.3</b>	<b>41.9</b>	<b>0.7</b>	<b>19.4</b>	<b>0.4</b>
Finland	46.1	7.7	38.3	9.8	23.2	6.8
US	54	4.9	57.8	6.8	75.7	3.8
OECD	62.6	3.8	62.8	5.2	55.1	4.3
Japan	63	0.8	65.9	1.8	51.9	1.1
Korea	63.7	2.7	57.3	1.5	53.2	3.6
Singapore	64.9	5.6	61.2	4.4	60.3	6.4
UK	69.2	3.3	63.6	6.4	77.1	6.0
Taipei	72.3	3.2	72.2	5.3	50.8	5.6

**ESCS = Socio-economic Background**

Source: OECD (2010), *PISA 2009 Results: Overcoming Social Background – Equity in Learning Opportunities and Outcomes (Volume II)*; OECD (2013), *PISA 2012 Results: Excellence Through Equity: Giving Every Student the Chance to Succeed (Volume II)*; OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*.

# PISA conclusions: Quality with Equality

- HK students perform well in all three assessments. Excel in quality.
- HK students benefit fairly equally from quality education in Hong Kong regardless of their academic ability.
- Socio-economic Status has only a relatively small impact on performance of HK students. That is to say, HK students perform equally well regardless of their socio-economic status, and probably more so over the years.
- Between school variations are largely due to socio-economic differences, but remain small compared with OECD averages and neighbouring regions.

# Socio-Economic Inequalities and University Education

- Methodology
- 5% samples of 2006, 2011, 2016 Hong Kong Population Census/ By-census are used.
- "University students" are those age 18-24 who are studying (full-time, part-time or distance courses) first degree programmes, local and external.
- Foreign domestic helpers are excluded in the analysis.

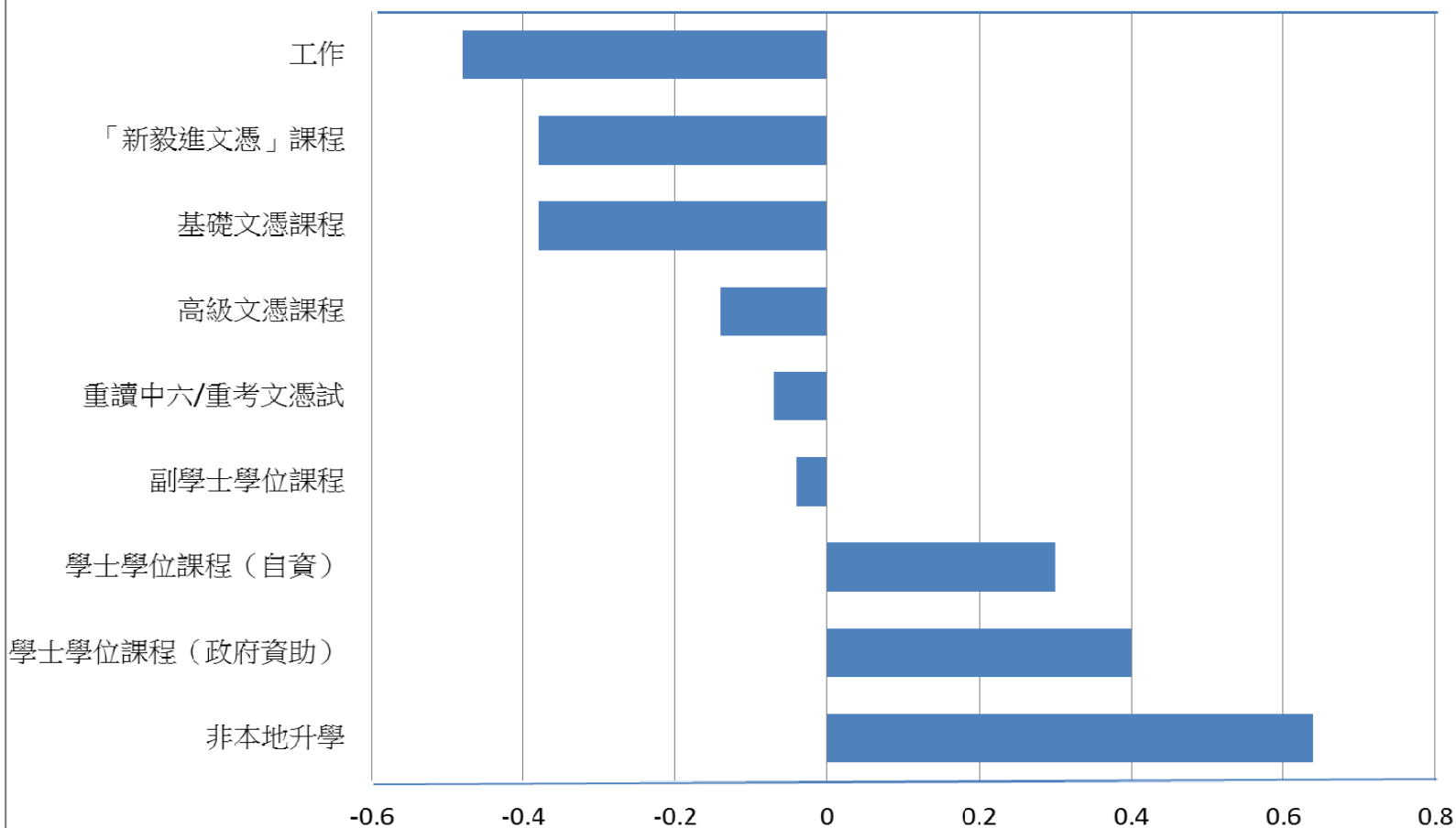


表一． 2014 年中六學生升學途徑研究

課程			2014
全日制 升學 (85.8%)	本地 (76.1%)	學士學位課程	25.7%
		專上教育課程 (包括副學士學位課程及高級文憑課程)	31.3%
		其他全日制課程 (包括職專文憑課程、基礎基礎文憑課程、其他文憑課程及職業發展計劃(包括文憑課程及展翅青見計劃)及毅進文憑課程)	17.6%
		中六課程	1.5%
	非本地 (9.7%)	學士學位課程	7.5%
		專上教育課程	1.8%
		其他全日制課程	0.4%
其他活動 狀況 (14.2%)	全職就業： 7.8% ； 兼職就業/兼職修讀： 4.2% 非就業/升學： 2.2%		
受訪中六學生人數： 62,338			

資料來源：香港特別行政區 教育局，未公開文件。

圖二.循九個主要途徑升學就業的中六畢業生的社經地位指數\*



\* 社經地位為一標準化指數，以家長的教育程度、職業類別及家庭所以擁有的資源評定，平均值為0，標準差為1。

来源：何瑞珠、岑國榮。2016年。《高等教育擴張下高中畢業生的升就歷程（一）》，《灼見名家》，10月22日。

Follow-up survey of 2012 PISA cohort found strong negative relationship between students' post-secondary destinations and socio-economic status.

**Table 1. Percentage of university students (age 18-24) in Hong Kong by single year of age, 2006-16**

Age	% of university students in age 18-24		
	2006	2011	2016
	%	%	%
18	2.4	3.0	14.2
19	11.0	13.2	28.2
20	22.0	23.0	38.4
21	24.4	29.1	41.0
22	21.1	27.6	32.1
23	16.3	18.3	21.4
24	9.8	10.2	11.4
Total	15.2	17.9	26.8

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.

**Table 2. Percentage of university students (age 18-24)  
in Hong Kong by sex, 2006-16**

Sex	% of university students in all age 18-24		
	2006	2011	2016
	%	%	%
Male	14.4	16.6	23.4
Female	16.0	19.3	30.2
Total	15.2	17.9	26.8

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.



**Table 3. Percentage of university students (age 18-24) in Hong Kong by type of living quarters, 2006-16**

Type of Quarters	% of university students in all age 18-24		
	2006	2011	2016
	%	%	%
Public rental	9.4	11.3	20.0
Public owned*	18.9	17.5	28.8
Private	16.8	24.4	31.9
Total	15.2	17.9	26.8

\* include those not have their mortgage fully paid up.

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.

**Table 4. Percentage of university students (age 18-24) in Hong Kong by ethnicity, 2006-16**

Ethnicity	% of university students in all age 18-24		
	2006	2011	2016
	%	%	%
Chinese	15.2	18.0	27.1
Asian (other than Chinese and South Asian)	16.7	13.8	14.0
South Asian	5.2	10.8	12.3
White	41.6	23.3	22.0
Mixed	17.2	18.6	20.6
Total	15.2	17.9	26.8

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.

**Table 5. Percentage of university students (age 18-24)  
in Hong Kong by place of birth, 2006-16**

Place of Birth	% of university students in all age 18-24		
	2006	2011	2016
	%	%	%
Hong Kong and Macao	16.5	19.7	29.4
The mainland of China	8.9	10.4	17.3
Developing countries	8.5	7.8	10.7
Developed countries	37.3	45.6	47.7
Not Specified	28.6	29.8	29.5
Total	15.2	17.9	26.8

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.

**Table 6. Percentage of university students (age 18-24)  
by duration of residence in Hong Kong**

	% of university students in all age 18-24		
	2006	2011	2016
	%	%	%
<b>Local born</b>	16.6	19.7	29.4
<b>Non-local born</b>			
<u><i>Duration of Residence in HK</i></u>			
< 7 years	7.9	6.4	7.9
7 - 15 years	8.9	10.9	18.4
More than 15 years	15.2	19.3	26.1
<b>Total</b>	15.2	17.9	26.8

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.



**Table 7. University students (age 18-24) in Hong Kong  
by place of study**

Place of Study	Those who are attending first degree courses		
	2006	2011	2016
	%	%	%
Hong Kong	71.6	70.8	77.5
The mainland of China, Macao and Taiwan	5.6	3.1	5.7
Overseas	22.8	26.1	16.8
Total	100.0	100.0	100.0

Source: 2006, 2011, 2016 Hong Kong Population Census/ By-census, 5% samples.

**% of 18-24 studying and attained first degree  
or above by monthly household income group**

\$0-9,999	36.1%
\$10,000-19,999	29.5%
\$20,000-34,999	33.3%
\$35,000-54,999	39.1%
\$55,000 or above	59.0%

% of 18-24 studying and attained **first degree or above** by parental education

	Mother	Father
Not living with parents	37.4%	34.9%
Secondary 5 or below	35.1%	34.4%
Matriculation or Diploma/Cert.	52.7%	51.3%
Non-degree post-secondary	56.4%	56.7%
Degree or above	67.7%	70.3%

% of 18-24 studying and attained first degree or above by parental place of birth and year of residence in HK if not born here

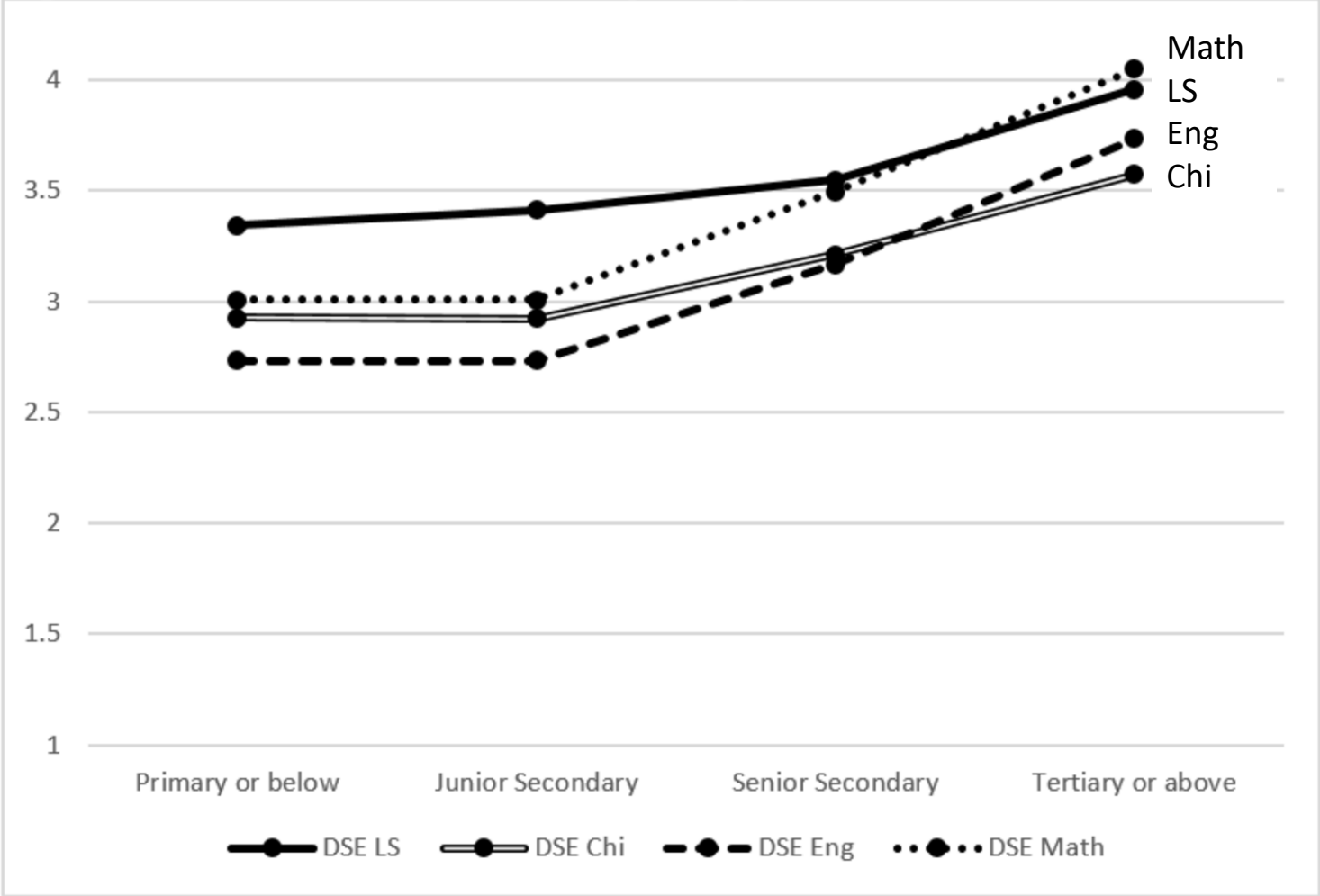
	Mother	Father
Not living with parents	37.4%	34.9%
6 years or less in HK	13.0%	17.6%
7-15 years in HK	22.8%	20.2%
16 years or more in HK	38.8%	38.7%
Born in HK	46.8%	44.4%



## Core Subjects and SES: Survey of First DSE Cohort

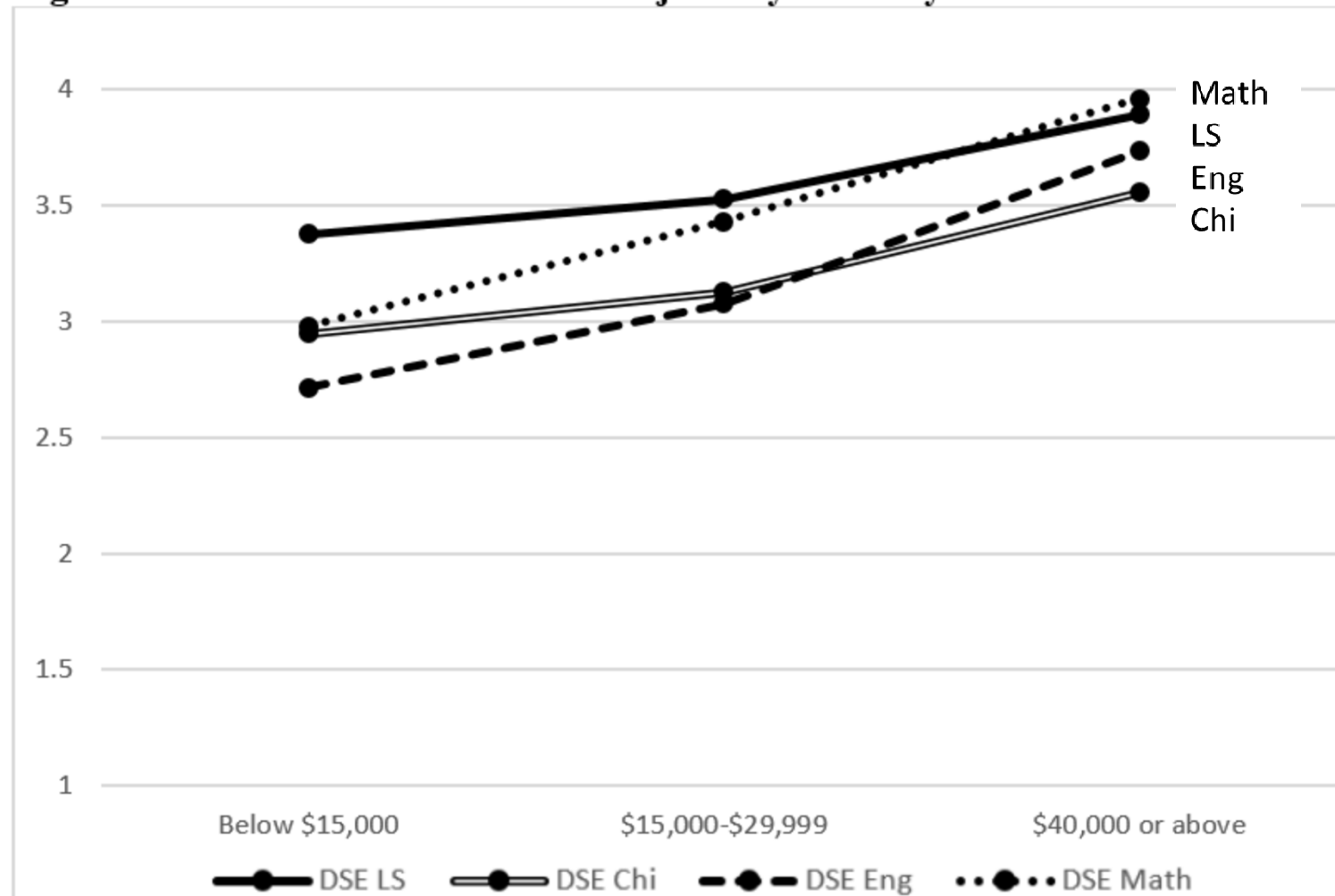
- Data were collected in a cross-sectional study of the first cohort of students (and their parents) studying the NSS curriculum between 2009-2010 and 2011-2012.
- The final analytic sample consists of 1,123 cases from 15 schools. Following the first Hong Kong Diploma of Secondary Education (HKDSE) Examination in 2012, the students' examination results were collected, with their consent, via their schools.
- Source: Lee Tsz Lok, Trevor. 2014. "Social Class and School Curriculum: The Case of Liberal Studies in Hong Kong" PhD Thesis. CUHK Sociology.

**Figure 3.1: Mean Scores between Subjects by Parental Education Level.**



Significant relations between parental income and education with DSE performance. However stronger in Mathematics and English than Liberal Studies and Chinese.

**Figure 3.2: Mean Scores between Subjects by Monthly Household Income.**



Significant relations between parental income and education with DSE performance. However stronger in Mathematics and English than Liberal Studies and Chinese.

# Conclusions on University Education from Censuses

- Increased enrollment ratio
- Widening gender gap
- Persistent gaps between ethnicities, places of birth and years of residence in HK
- Persistent gaps of enrollment by family income, parental education and parental migrant status.

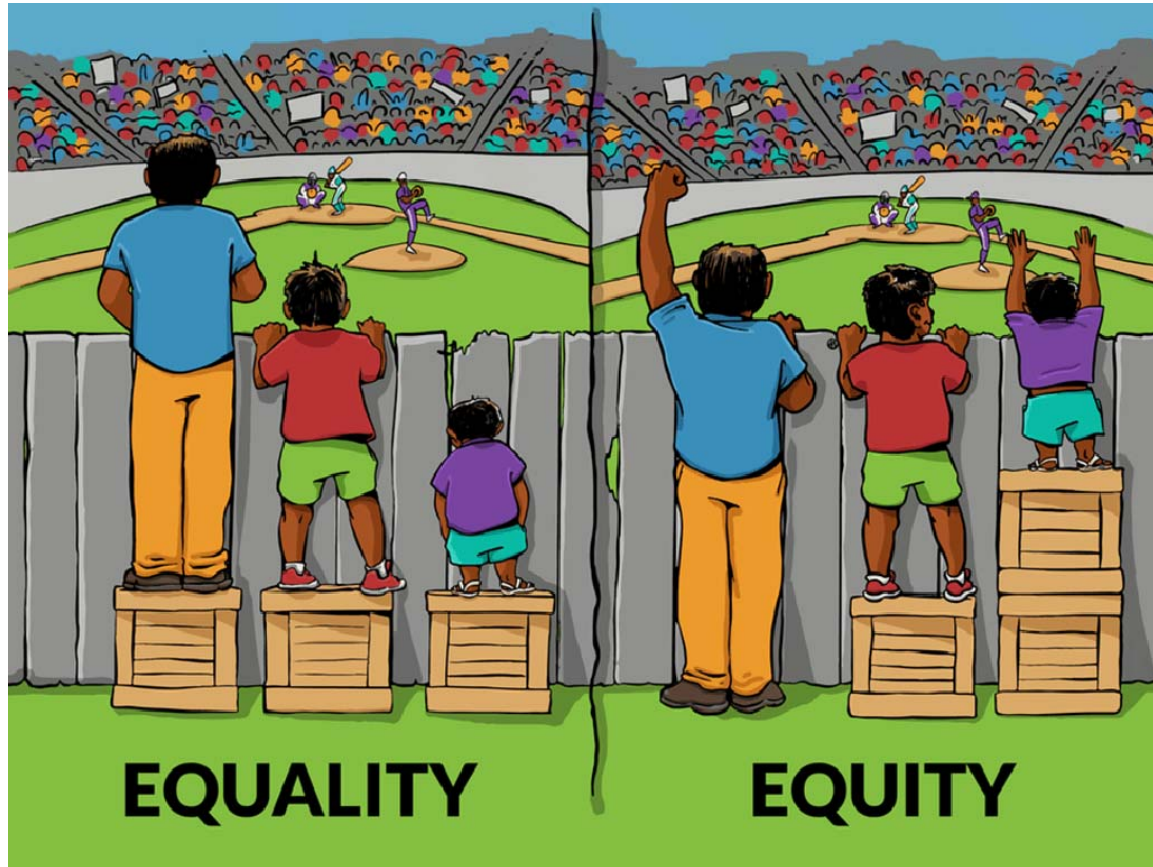
# From PISA to Census

- Relatively equitable picture in PISA
- But: persistent inequalities when it comes to university admission
- Contrast between low-stake PISA and high-stake JUPAS?
- Relatively small difference in PISA performance magnified in DSE and JUPAS?
- Test of basic competences in PISA versus public examinations as ranking exercise.
- Schools however are being judged largely by public examinations and JUPAS admission.
- Should we be concerned?

# Possible Responses?

- Personal reflection and experiences, have to be substantiated by research and practice
- Sociologists are notorious for identifying problems but our ability in solving problems is limited by our understanding that the causes of many problems are fundamental and difficult to change.
- Many educational inequalities stem from social inequalities such as class, migration and ethnicity.
- In sociology, we know that schools could not solve social inequalities in the short run.
- The best education could do is to compensate for and alleviate social injustices.
- But schools have a role!

# (1) Equity vs Equality



Should resources be proportionate to challenges that students face? Secondary school allocation system stratified students by “ability” but resources are fairly equally distributed per head. Should students with more learner diversities be allocated more resources to compensate for the initial inequalities?

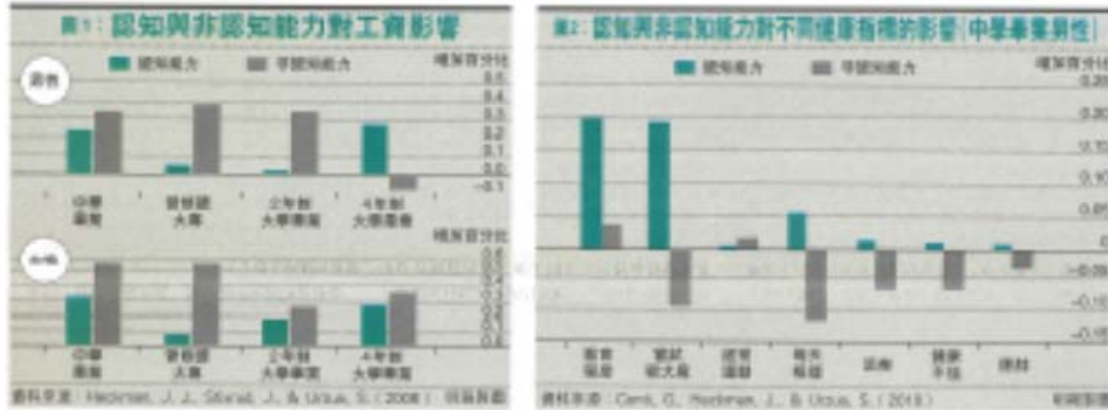
## (2) Curriculum and pedagogy

- How could we tackle learner diversity better? Schools are doing a lot but perhaps limited by traditional mindsets in pedagogy and curricular constraints.
- How could we make allowance for learner diversity in classroom? Uniform curriculum and assessment vs adjustment for diversity?
- The pitfalls of teaching to assessment? Should we start preparing for DSE in F1?
- Overcrowded curriculum (GS, Chinese History and LS as examples)
- Basic competences in communication (Chinese and English). Too grammar-based? Contrasting stories for middle class and working class students.
- How could we bolster motivation and create self-directed learners?



### (3) Non-cognitive Skills and Character Building

「死讀書」=「讀死書」？



恩潮  
船永佳

是社會學的人，對經濟學家一般都沒有好感。這當然有了「新正」的禍端。但事實上向來多端在外界，也是經濟、不滿，凡事都有例外，今天我就帶向大家介紹其中一位令我佩服的經濟學家——詹姆斯·赫克曼（James Heckman）。

圖1的Y軸上。如圖1所見，除了在4年級大學畢業的年份（1970年）之外，少年時期所讀的書對認知能力沒有顯著的長期影響。正如我們所料，讀書對智力的影響是暫時的，而在社會化中充實頭腦，還有，非認知能力對學業成績的影響，舉不及智力，但也是有顯著影響。

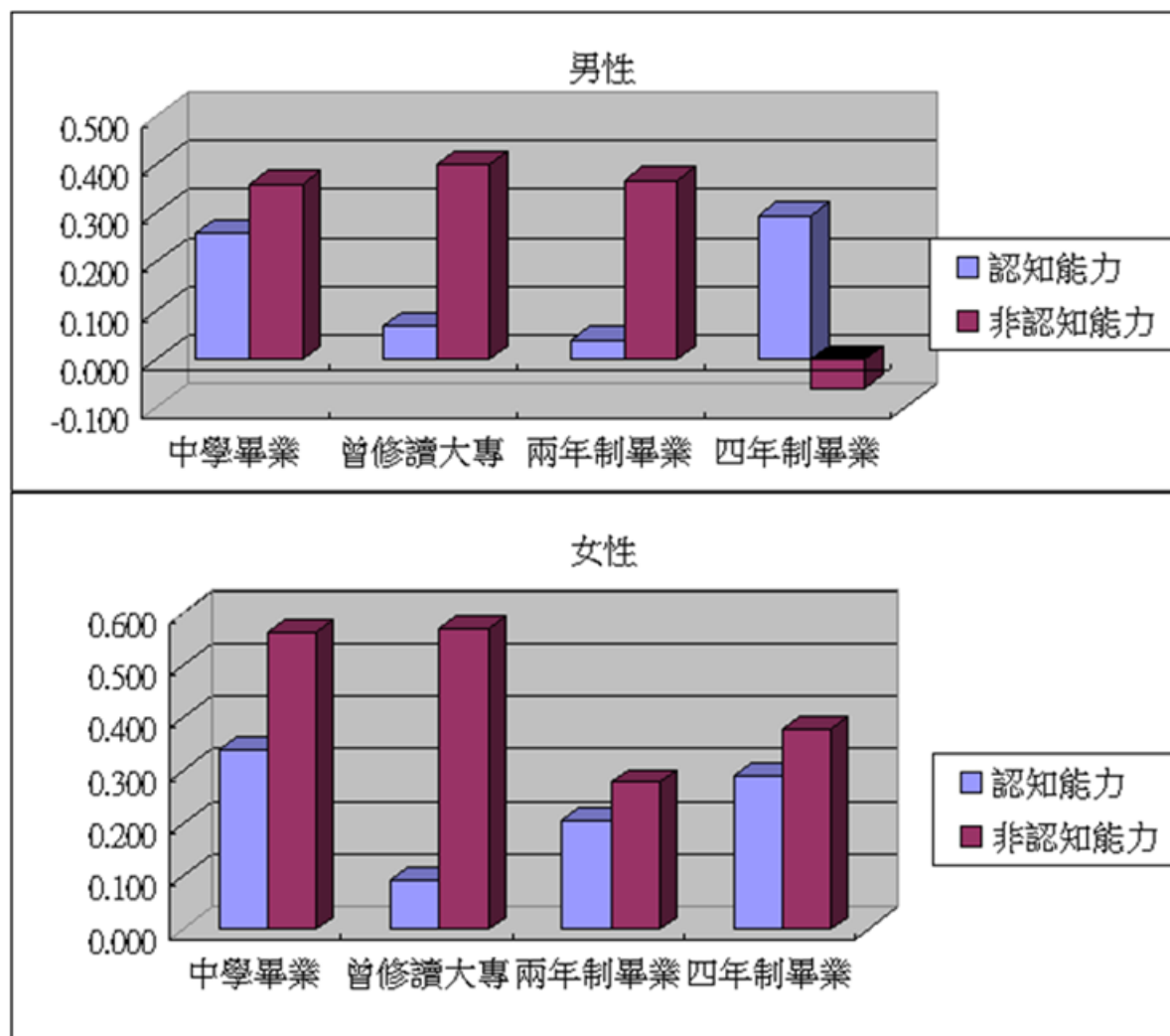
赫克曼也分析了另一個兒童閱讀的大規模研究。研究發現了1950年4月至1954年4月1日在英國二歲至五歲的兒童閱讀。他在其近50年調查中進行了大量的

C88) 阿齊納的魔咒下(金力欣成稿)。某家廣告公司往往能尋獲成稿的重要情節(阿國)廣告平心。在下百金請到吉吉人志, 創制下南國人且地山下開張的學校, 但也不如加我我們也學校與家庭中, 確實往往能說和能力和學業成績不為難於相配。

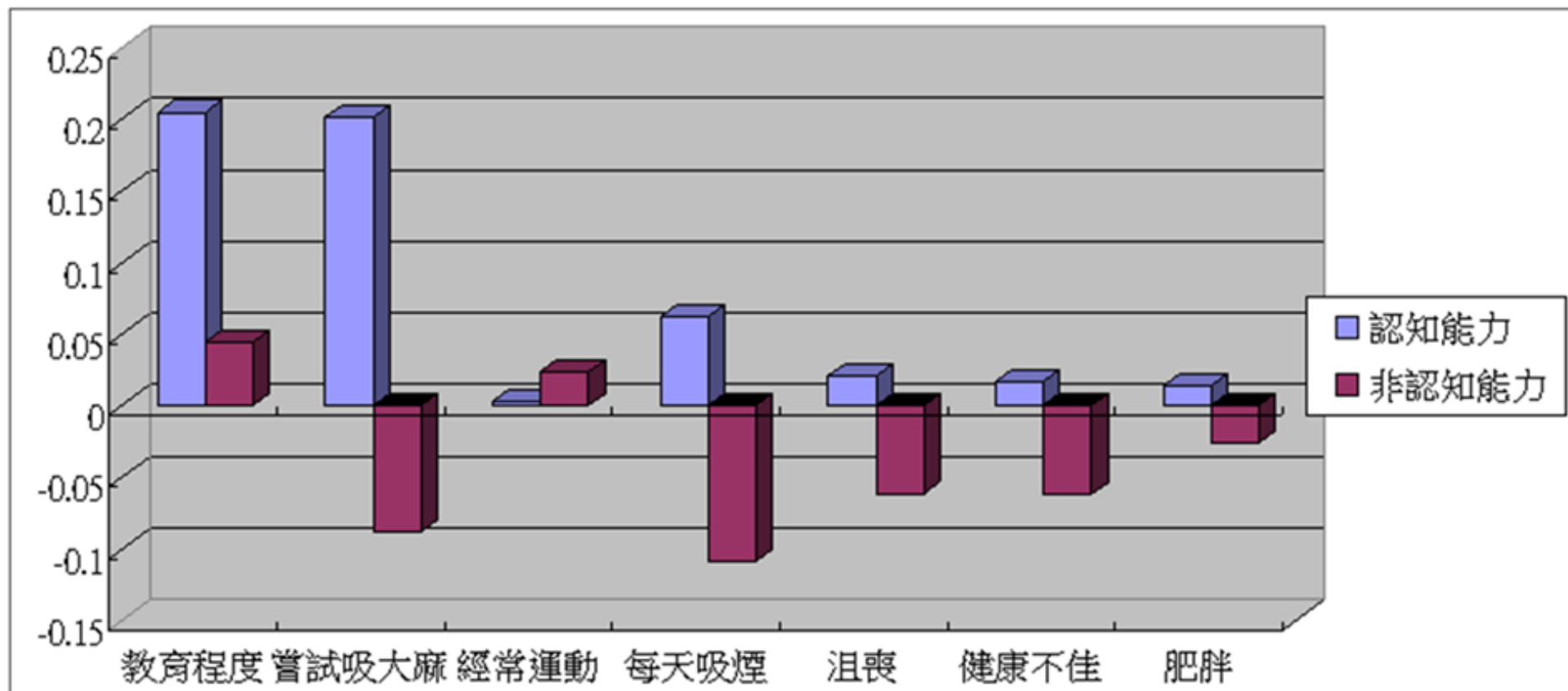
當然消費者和買家不可能不知道這品偽的虛假，但學業能力被遏，也和體育制度中的各種限制有重大關係。我們的公立大學學校教育稀少，成人學額卻因限制佔基本上以第一標準決定，因同學們高中畢業後出外，裡面我們因制度中若各種限制的限制，如於引

We should focus more on non-cognitive skills (endurance, concentration, resilience etc) than just cognitive/ academic skills. In particular junior form students often experienced many failure in senior primary. They need to go through a period of rehabilitation so that they could rebuild their self-esteem, find their goals, and identify their own strength and interests.

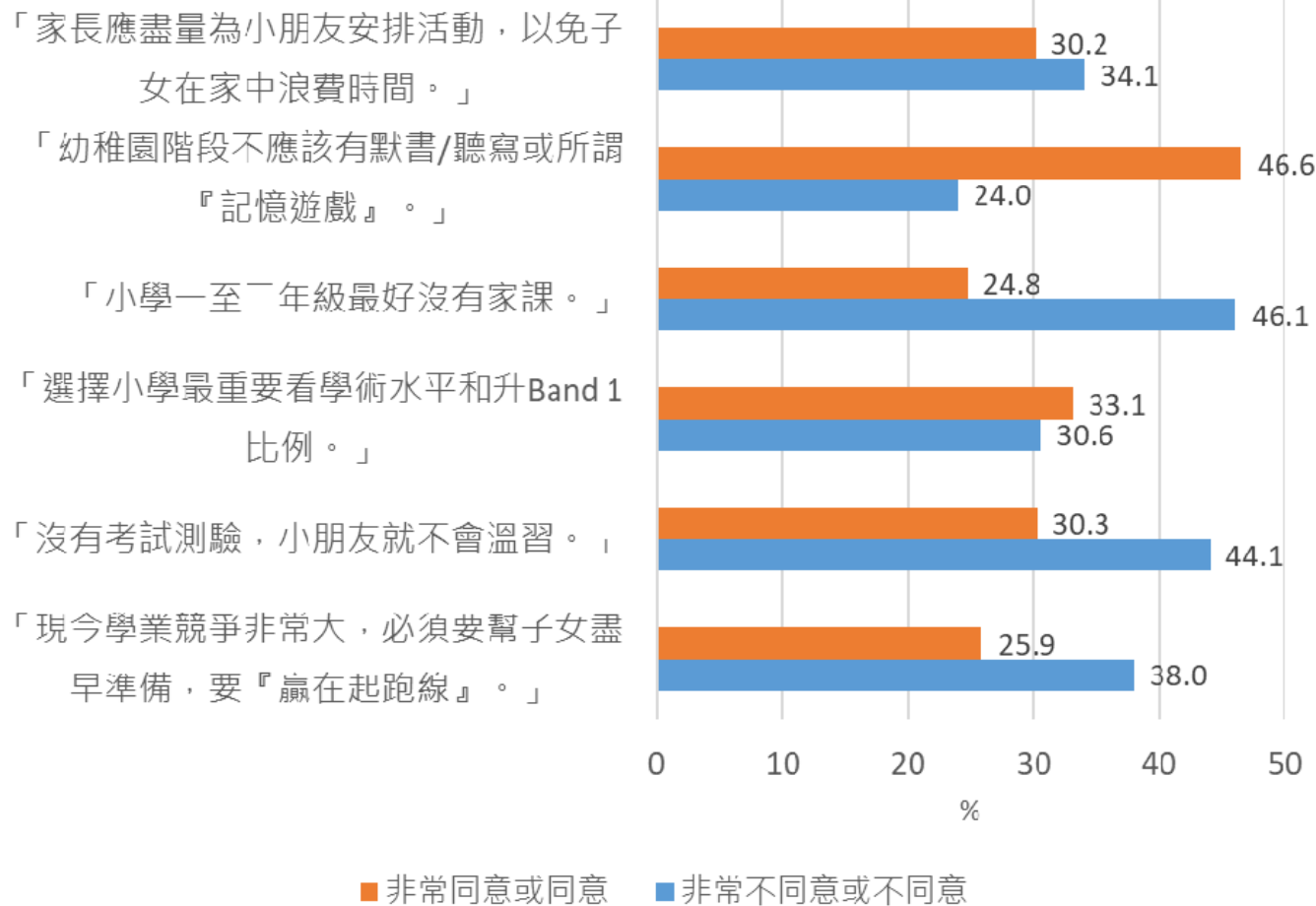
圖一：認知與非認知能力對工資影響



圖二：認知與非認知能力對不同健康指標的影響 (中學畢業男性)



### 幼稚園家長對於子女教育的觀點

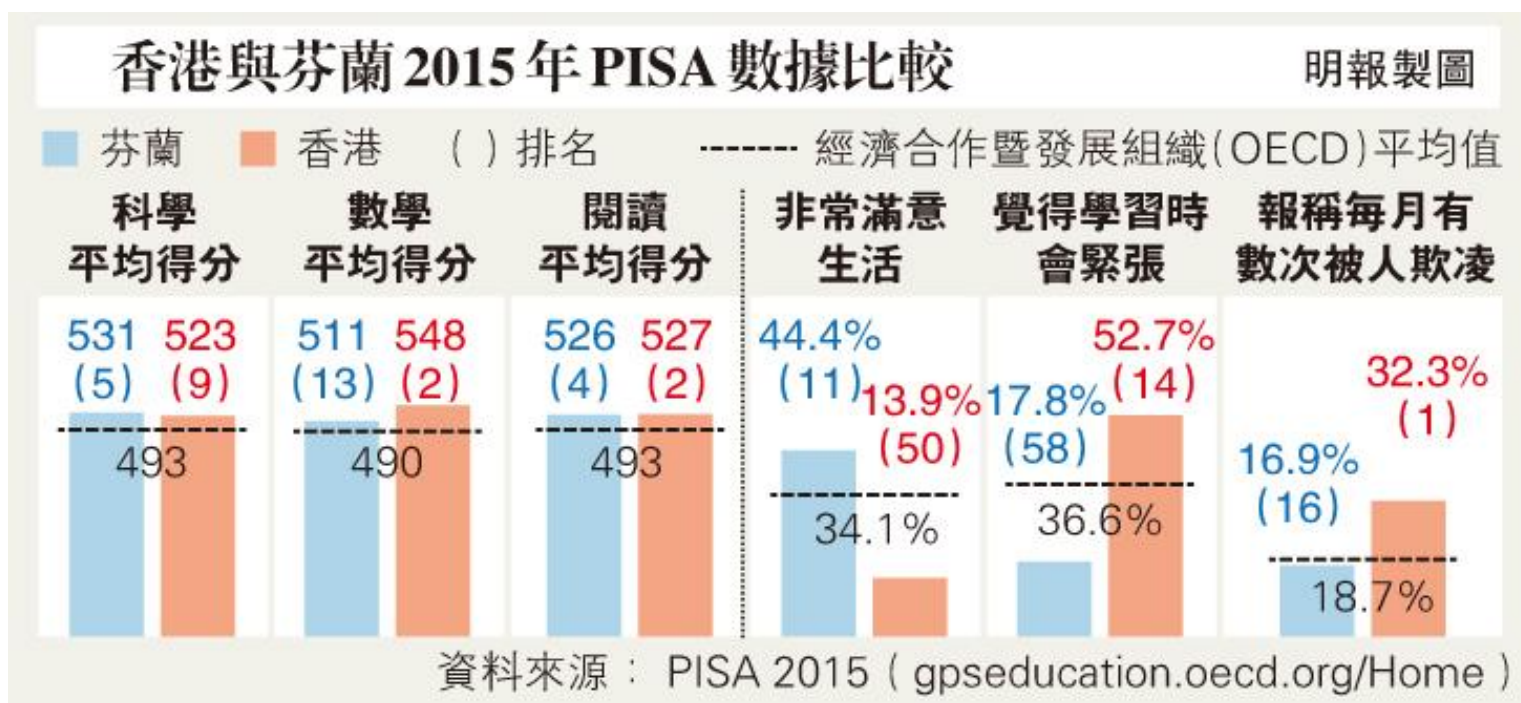


Only a small portion of parents are truly “liberal”, many are still traditional with emphasis on academic achievements.

趙永佳：當「家長」變成社會問題 明報 2017年4月10日

[https://news.mingpao.com/pns/dailynews/web\\_tc/article/20170410/s00012/1491761278647](https://news.mingpao.com/pns/dailynews/web_tc/article/20170410/s00012/1491761278647)

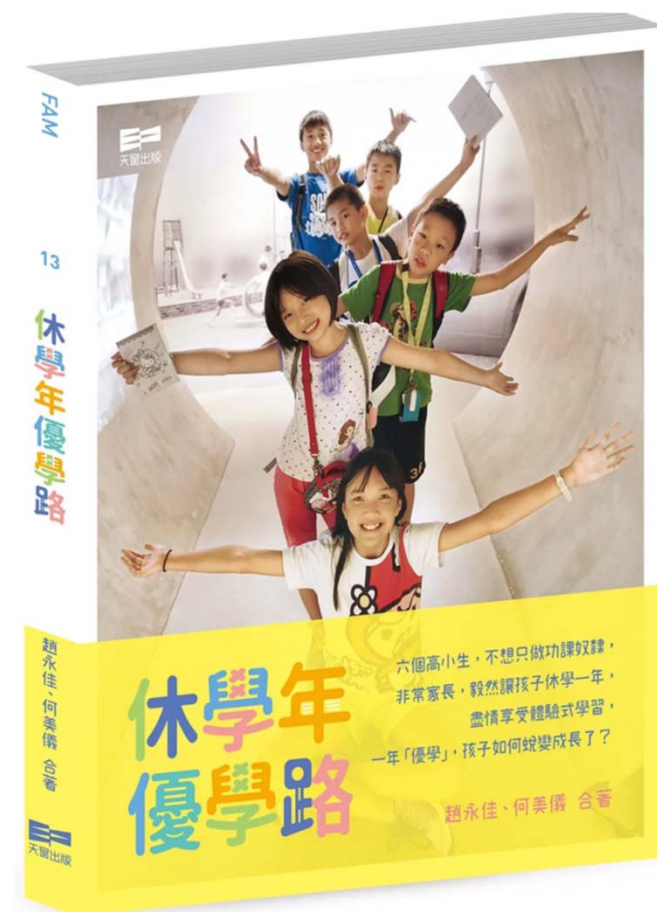
Excessive competition will often create a lot of problems among young people and not conducive to strong character. Hong Kong students the highest percentage of bullying at school.



趙永佳 / 何美儀：芬蘭教育給香港老師的3堂課 明報 2018年3月12日

[https://news.mingpao.com/pns/dailynews/web\\_tc/article/20180312/s00012/1520791865507](https://news.mingpao.com/pns/dailynews/web_tc/article/20180312/s00012/1520791865507)





## (4) Multiple Pathways

- 70% of F5 students thought they should earn a degree, but no more than 35% could do that now. What should we do with the other 65%?
- Youth College not a success and VPET with low prestige.
- Applied Learning a possibility? Give students a Plan B? Alternative assessment and curriculum.
- The importance of articulation. More senior year places for higher diplomas? UGC places for mature students? Multiple exits and entry points needed!
- A whole-school approach to career and life development

### Why Develop a P-TECH School?



### Who Creates a P-TECH School?



### Supporting and Funding P-TECH Schools



A new model of education — the P-TECH 9-14 school — is helping close the gap between young people's ambitions for college and careers and the specific skills needed by employers in high-growth industries.

In a P-TECH 9-14 school, students earn a high school diploma, an industry-recognized associate degree, and gain relevant work experience in a growing field. The schools create a seamless program for students to acquire the academic, technical, and workplace skills and knowledge that employers need.

The unique culture of a P-TECH 9-14 school is built upon high expectations for students and adults alike. Students see themselves as "college students" and "on a career pathway" from





FEBRUARY 24, 2014

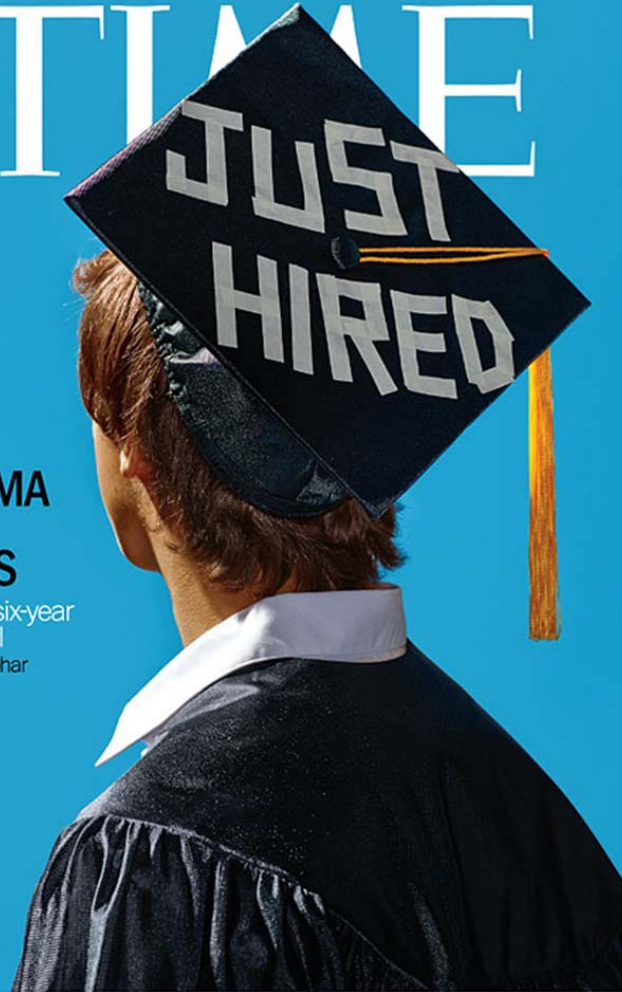
Saving Mexico / Mammogram Myths / The Cult of *Frozen*

# TIME

JUST  
HIRED

## THE DIPLOMA THAT WORKS

Inside the six-year  
high school  
By Rana Foroohar



time.com



# Colleges Are No Match for American Poverty

Amarillo College, in Texas, is working hard to accommodate low-income students—but it can only do so much.

MARCELLA BOMBARDIERI | MAY 30, 2018 | EDUCATION



<https://www.theatlantic.com/education/archive/2018/05/college-poor-students/560972/>

# Concluding Remarks

- Why not teachers' training?
- Schools could not solve social problems. It could only alleviate them to a certain extent.
- Institutional and cultural changes are important.
- But of course schools and teachers could not sit back and do nothing.
- Together we could change institutions, and even a single school could make some changes among their students.
- Education University of Hong Kong is here to play our part in any innovative process!

- 通識科「教壞」青年人？

- 主講：趙永佳

- 時間：7月3日(二)上午10時至中午12時

- 地點：大埔校園D3-LP-07

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Keep in touch!

