Key question for a global university

2 Nov 2015
Gerard A. Postiglione
The University of Hong Kong.
The result of China’s opening and reform for higher education has been an intellectual vitality that may be as broad and deep as the Western Renaissance.

China 2025

“a unique and exportable university model”
WEALTH AND POWER

CHINA'S LONG MARCH TO THE TWENTY-FIRST CENTURY

ORVILLE SCHELL AND JOHN DELURY
WHEN CHINA RULES THE WORLD
THE RISE OF THE MIDDLE KINGDOM AND THE END OF THE WESTERN WORLD
MARTIN JACQUES
FAREED ZAKARIA
THE POST-AMERICAN WORLD
And the Rise of the Rest
China’s universities

• Rising world class
• Most students
• World #2
  – GDP for R&D
  – Scientific publications
%GDP for R&D

- 0.6% in 1995
- 1.3% in 2005
- 1.44% in 2007
- 2.5% by 2020
Comparison of annual change in national R&D investment

While China's rate of annual growth is dropping from unsustainably high levels, it still exceeds the U.S. and is catalyzed by GDP growth.
R&D Funding Forecast (Battele and R&D Magazine 2014)

The graph shows the forecasted R&D funding in billions of US dollars (PPP equalized) from 2012 to 2024 for the U.S., China, and EU30. The funding is projected to increase over time, with China showing a sharper rise compared to the U.S. and EU30.

Source:
Leading indicators of innovation

China is rapidly gaining in patent applications and scientific publications

Source: WIPO, Nature Publishing Index
Growth of articles published in peer-reviewed journals

Number of articles in 2008

- China: 112,318
- Brazil: 30,021
- India: 38,366
- US: 332,916
- Russia: 27,605

Sources: Thomson Reuters, Web Science Database
And China originates an increasing percentage of global scientific literature.
Chinese researchers expect more change in nearly all research domains than their U.S. counterparts (1-5 scale).

Source: Battelle and R&D Magazine

- U.S. 3.3
- Japan 3.2
- Germany 3.1
- China 2.7
- South Korea 2.5
- United Kingdom 2.5
- India 2.4
- Canada 2.3
- France 2.2
- Russia 2.0


- China 3.4
- Japan 3.2
- U.S. 3.1
- Germany 3.0
- India 2.8
- South Korea 2.7
- United Kingdom 2.4
- Canada 2.3
- France 2.2
- Russia 2.1

Ratings (1 = Weak to 5 = Strong) by Respondents to Battelle/R&D Magazine Survey
Rapidly changing drivers of Growth

Low Cost Labor Drives Growth
Low Cost Capital Drives Growth
Low Cost IP Drives Growth

Global Knowledge networks drive innovation

Source: De Woskin and Stevenson, April 2005.
Source: Haustein, Tunger, Heinrichs, Baelz. 2010
15 YEAR MEDIUM-TO-LONG TERM S&T PLAN 2006-2020

MEDIUM-TO-LONG TERM EDUCATION REFORM PLAN for 10 Years

MEDIUM-TO-LONG TERM TALENT DEVELOPMENT PLAN

Strategic Innovation Triangle
13th 5 Year Plan
Suggestions to China’s Reform and Development Commission

• Clear differentiation of missions
• More focus on equity
• Expand representation of enterprises and Incentives for start-ups
1. Domestic demands
   ----3 demands
2. Global aspirations
   ----3 conditions
Domestic demands on universities

1. Knowledge & skills
2. Status culture
3. Stability and 富强
CONGRATULATIONS GRADS

UNEMPLOYMENT
7 million graduates
Likeliness of securing a job

• Equity:
  • National universities vs. provincial and vocational
  • Eastern region vs western region
  • Computer sci, Engineering, med vs. other fields

• Men: women
• Urban residents: rural residents
• Father’s education and occupation, etc.
Global aspirations

1. Deepen internationalization
2. Protect educational sovereignty
3. More autonomy for universities

Any 2 = easy
Any 3 = hard
1. Internationalization

“As never before in their long history, universities have become instruments for national competition…..”

Richard Levin, President, Yale University, Newsweek, Aug. 21-28, 2006
2. Protecting educational sovereignty
• “Tough tasks lie ahead for China to **safeguard its educational sovereignty** as it involves our fundamental political, cultural, and economic interests and every sovereign nation must protect them from being harmed” (Chen 2002).

• “..we must **safeguard China’s educational sovereignty**, protect national security, and guide such programs in the right direction”(L.Zhang 2009: 19).
3. University autonomy
At your institution, which actor has the primary influence on each of the following decisions? (%)
Decision making: Institutional management

At your institution, which actor has the primary influence on each of the following decisions? (%)
At your institution, which actor has the primary influence on each of the following decisions? (%)
At your institution, which actor has the primary influence on each of the following decisions? (%)

- Approving new academic programs
- Evaluating teaching
- Setting internal research priorities
- Evaluating research
- Establishing international linkages

*Mainland China* vs. *Hong Kong*
• Western model
• China model
• Will Asia be just producing more of the same of the Western-originated contemporary higher education model, or ... a cultural and epistemological reflection of the role of universities.....? (Cheung 2012: 186).
The China Model: How China’s Rise is viewed from overseas
Annual Blue Book of Development and Reform: China’s Road and the China Model 1949-2009
China’s indigenous Academy
Indigenous thinkers on education

- Ancient: Confucius, Mozi, Sunzi, Mencius, Laozi, Zhu Xi, Wang Yangming
- Modern: Hu Shi, Liang Qichao, Yan Yunding, Mei Tiegui, Zhang Bolin, Yan Fu, Tao Xingzhi, Pan Guangdan, Cai Yuanpei
- Contemporary: Gu Mingzhan, Huang Ji, Li Bingde, Lu Jie, Wang Fengxian, Pan Maoyuan
What happens when two models come together?

\[ A + B = ? \]
Sino-foreign cooperation in the running of educational institutions
Duke University Kunshan, China
Western model + China Model = A + B = A
A + B = A + B

Diagram:

```
A + B = A + B

A
B
```
A + B = C

A

B
Tsinghua University in Seattle
Xiamen University in Malaysia
• Innovation
• Inequality
• Sino-foreign domestic campuses
• Sino-foreign external campuses
• 2025 Unique and exportable model
Thank you
A matter of culture?

Francis Hsu:

The absence of Self in Chinese Culture

Smaller Self submits to Larger Self

(犧牲小我，完成大我)

Universities’ role (**domestic** and **external**)

1. China’s universities are set to satisfy the domestic need for innovative talent, (even without a liberal arts focus), but not on a mass scale.

2. Are increasingly aware of growing inequality in access but less so in campus life and grad employ, especially in top tier universities.

3. Hosting of overseas university liberal arts campuses in China has not affected China’s university system as imagined (yet), but does provide status culture for growing the urban middle class (will expand to 75% over the next 10 years—a demographic statistic that reflects economic growth and, to some extent, an innovation-enabled society.

4. China’s external campuses in developed economies have a better chance of bringing change back to China’s university system. China’s campuses in developing counties can bring benefits because most of China’s research is development focussed.
2025 model of measurable predictors

**In favor**
- World economy
- Aspirations to go global
- Investment in S&T
- Infrastructure hardware
- Attention to rankings
- Growing access
- Historical mission
- Attention to ranking
- Overseas returnees
- Global diversity
- Hub for overseas study
- Cultural model
- Developing country leadership

**against**
- New normal
- Software
- Institutional autonomy
- academic freedom in H&SS
- Non-integrated systems
- Inbreeding
- Flow of information
- Open markets
- University over administration
- Demographic trends
unknowns

• World economy
• Global stability
• Environmental catastrophe
• Recruiting talent into academic profession
• University leadership format change
Western Model

1. Ranked world class universities
2. Institutional autonomy
3. Organizational accountability
4. High quality teaching and assessment
5. Creative learning for innovative leadership
6. Liberal arts and entrepreneurial culture
7. Cutting edge S&T research
8. Commercialization of inventions
9. Hub for international students
10. Brain retention
China and Globalization

The Social, Economic, and Political Transformation of Chinese Society

DOUG GUTHRIE
China-ASEAN College of Marine Sciences” Project Progresses Smoothly
中國開放和高等教育改革的結果是一個知識分子的生命力，這個可能與西方文藝復興一樣的廣泛和深遠。

——傅高義,哈佛大學亨利·福特二世，亞洲研究教授
《華盛頓郵報》，2003年5月
“average is over”
Figure 1: Gross domestic expenditure on R&D by top six countries, 2011

- USA: 401,576 million current PPP$ (2.77 GERD/GDP)
- China: 208,172 million current PPP$ (1.84 GERD/GDP)
- Japan: 146,537 million current PPP$ (3.39 GERD/GDP)
- Germany: 93,055 million current PPP$ (2.88 GERD/GDP)
- France: 59,890 million current PPP$ (2.24 GERD/GDP)
- UK: 35,045 million current PPP$ (1.77 GERD/GDP)
At your institution, which actor has the primary influence on each of the following decisions? (%)

- Approving new academic programs: 1 Mainland China, 2 Hong Kong
- Evaluating teaching: 1 Mainland China, 2 Hong Kong
- Setting internal research priorities: 1 Mainland China, 2 Hong Kong
- Evaluating research: 1 Mainland China, 5 Hong Kong
- Establishing international linkages: 2 Mainland China, 26 Hong Kong

Decision making: Individual faculty members
China's presence in international journals

Number of papers


Year
Global share of S&T publications 1999-2009

• USA declined from 31% to 26%
• EU declined from 36% to 32%

• PRC increased by 16.8%
  – Almost 10% of world total

• Liberal Arts Harvard Centre recently and my part of China has converted form 3 to 4 LAS.
• The argument goes that the mainland needs it to help it launch into innovation that can drive the economy and society.
• At the same time, Liberal arts is viesdas westernication, which it is, and has not happened for both political and also cultural reasons – even scholars trained in the west are debating about a China mode, and this ties in which the new world order talked about during Xi Jinping’s visit to US and Henry Kissinger’s opening.
• So the question is:
• Will China have a unique and exportable Research university model