Establishing a Research University: The Case of the Hong Kong University of Science and Technology (HKUST)

香港科技大學

Prepared for the 3rd International Conference on World-Class Universities (WCU-3)
Shanghai, November 1-5, 2009

"Rome was not built in a day" 冰凍三尺，非一日之寒

- An American story:
  - Harvard (Elliot) - 200 years and $50M
  - UC (Rockefeller) - 20 years and $50M+

- A China story
  - HKUST: 10 years and $400M

[Yesterday's Dollars]

[Today's Dollars]
Globalization & the post-American world with the rise of the rest

The pace of change has quickened and raised expectations

HKUST: Established in 1991

1999: ranked #7 in Asia
2009: ranked #4 in Asia (QS/THE)
HKUST website

- **No. 39** World's Top 200 Universities (2008)
- **No. 24** World's Top 100 Universities in Technology (2008) *(Times Higher Education)*
- **No. 40** World's Top 100 Universities in Engineering/Technology and Computer Sciences (No. 1 in Greater China) (2008)
- **No. 51-76**, World's Top 100 Universities in Social Sciences (No. 1 in Greater China) (2008) *(Academic Ranking of World Universities by Shanghai Jiao Tong University)*

**Hong Kong SAR, China**

4 universities rank in top 10 in Asia & top 50 in world *(Times Higher Ed)*

- HKU – 2009 Asia #1 (QS) [#26 THE 2008]
- CUHK - 2009 Nobel prize [#2 Asia]

“Boston is the Hong Kong of the West”
Hong Kong Vision and 2-pronged strategy:

- Establish a new university
- while developing the flagships

The HKUST 18 year story

- TALENT
- RESOURCES
- GOVERNANCE
Talent – Talent - Talent!

- Recruit researchers, not administrators!
- Recruit from the Diaspora
  - “They had talent, they had ability, but in the end what brought them here was their hearts”
- Mid-career + young generation + incl. native HK’ers
- 100% doctorates - 80% WCs:

Resources

- Virtually unlimited during establishment period

Block grant is about 63% of the revenue.
Governance context

- Government funded
- Institutional autonomy
- Academic freedom
- Rule of law – intellectual property
- Freedom of movement – open borders
- Communications infrastructure
- Supportive culture of philanthropy
- One country and two systems
- Interlocking and collaborative system

Institutional governance

- Phase 1: Contrast with status quo
- Phase 2: Academic staff are relatively tolerant of managerialism (CAP study)
HKUST structure

- **Fields:**
  - Science
  - Engineering
  - Business & management
  - Support program in humanities & social sciences

- **Size:**
  - Economies of scale
  - Medium and stable enrolments

- **High impact areas**
  - Nano-Science and Nano-Technology
  - Biological Sciences and Biotechnology
  - Electronics, Wireless and Information Technology
  - Environment and Sustainable Development
  - Management Education and Research

Leadership Vision: Wu, Chu, Chan

- “create, don't replicate,”
- “designed to be different”
- “an agent of change”
- “a catalyst...”
Rise and Rejuvenate

Phase 1
- Import
- Copy
- Sequencing
- Alignment
- Traditional disciplines
- No alumni
- No student base

Phase 2
- Homegrown
- Create
- Make corrections
- Realign
- Multidisciplinarity
- Build alumni
- Expand student base

Phase I: Find a niche, Be a catalyst

- Strong emphasis on research (RGC)
- Liberal arts requirement
- Entrepreneurial ethos
- Tech transfer edge (innov&tech fund)
- Central research facilities
- Multidisciplinarity
Phase 2: The Institute for Advanced Study

- collaborative projects across disciplines and institutions.
- relationships with academic, business, community, and government leaders
- transforms Hong Kong and the Greater China region into a global source of creative and intellectual power.

For new universities

- Be aggressive in making your name with prospective students
- Extend your capacity in the nation or larger region beyond the territory
- Make the identity of projects at your university
Remember

- Think of phase 2 while in phase 1
- The global academy does not sit still
- Iconic models that worked yesterday might not today

During a recession

- Protect the resource allocation to teaching and research.
- Government guaranteed loans for all students
Summary

- Seize the moment – “timing is everything”
- Exploited a niche – “be a catalyst”
- Rise & rejuvenate – sequence & realign
- Extend capacity – regionalize
- Became recession-proof
Thank you!