Pedagogical innovation: Developing and delivering an enterprising educational eco-system in NTU.
Pedagogical innovation: Developing and delivering an enterprising educational eco-system in NTU.

WHY?

WHAT?

HOW?
The World is Changing; Are you?

If you are not one step ahead, You are two steps behind

Jack Welch, former CEO, General Electric
Map of Singapore with locations of Changi Airport, Downtown hotels and NTU
Population of Singapore:

1819 - 150 people (Founded by Sir Stamford Raffles)

1860 – 81,000 people

1950 – about 1 million

1970 – about 2 million

1990 – about 3 million

2013 – 5.4 million (citizens and PRs – 3.85 million)

A Glimpse of housing in Singapore *Before Transformation* – circa 1955
Housing in Singapore After Transformation

Source: Photo by R. Ian Lloyd
Some of the mainstream economic sectors

Chemicals (including petro-chemical industry

Electronic and precision engineering

Manufacturing including pharmaceuticals

Logistics and transport services

Infocomms and media

Financial services

Trading

Tourism including edu-tourism, medi-tourism
The New Business Landscape Configuration

Value Migrator

- Significant Forces of Change

Value Supplier
- New Competitive Setting Indications
- New Value Propositions

Value Demander
- Winning Value App
- New Value Requirements
- New Customer Profile Indications

Value = \( \frac{FB + EB}{P + OE} \) = \( \frac{Total \text{ "Get"}}{Total \text{ "Give"}} \)

Company

Existing Competence
- Risk-Attitude
- Stretch Possibility

The Quantum Leap

Jack Welch's Giant Step Forward

Thinking in terms of fundamental changes, with respect to the world outside, rather than internally
RIEC – Research Innovation Enterprise Council identified

3 key research areas (and why):

(Source: The Straits Time, Saturday, July 8, 2006, pp 1)
Environmental and Water Technologies:

Singapore can leverage on the early investments it has made to meet domestic water shortages.

Its decades of experience will stand it in good stead as water shortages worsen worldwide.
Biomedical Sciences:

The field already has a strong base here and the next step is to translate discoveries to useful treatments for patients.
Interactive and Digital Media

Singapore should exploit its strong IT foundation, intellectual property regime and infrastructure, as well as its multicultural and multilingual society to grow this sector.
Nanyang Technological University, Singapore
Yunnan Garden Campus
About NTU

- **Total student population:** $\approx 33,500$
  - $\approx 24,000$ undergraduates
  - $\approx 9,500$ graduate students

- **International students:**
  - 20% of undergrads
  - 52% of Masters
  - 79% of PhDs
  - 9% of Doctor in Education

- **Total staff strength:** $\approx 6,850$
  - $\approx 1,700$ faculty (including visiting faculty), with 943 international faculty
  - $\approx 2,350$ research staff
  - $\approx 2,800$ admin & support staff
NTU – A Fast-rising University

Top 50 university in the world
Quantum leap of 33 places over 3 years
Fastest Asian rising university in Top-50

Ranked Top 10 in Asia
QS World University and Asia Rankings

Top 100 in the World
Times Higher Education World University Rankings
Unprecedented leap of 93 places over 2 years
(169th in 2011 to 76th in 2013)
Transformation: *Political, Technical and Cultural Change*

David Hurst, *Crisis and Renewal*
“To meet the challenges of globalisation, Singapore’s next generation must be both innovative and entrepreneurial..."
Nanyang Technopreneurship Center (NTC)

Established in January 2001

Seed funding from NTU and the Singapore Economic Development Board

A multi-disciplinary university-level center
Students’ Interest in Entrepreneurship
(3 General Categories)

- Desire to Acquire a more in-depth knowledge and to become entrepreneurs
- Wish to have an understanding of entrepreneurship
- Interest in enriching their university experience
Entrepreneurship Education

PROGRAMMES

Undergraduate programmes

Electives
Minor in Entrepreneurship

NANYANG TECHNOPRENEURSHIP CENTER | MIE
Minor in Entrepreneurship

Postgraduate programme

NANYANG TECHNOCENTER | MSc TIP
MASTER OF SCIENCE TECHNOPRENEURSHIP & INNOVATION PROGRAM

Executive programmes:

English
Mandarin

ACTIVITIES

Entrepreneurship & Innovation Week 2012

ENTREPRENEURSHIP & INNOVATION WEEK 2012
13TH – 18TH AUGUST

ENTREPRENEURSHIP & INNOVATION WEEK 2012

Minor in Entrepreneurship
MiE Speaker Series

NTC Face-off
(Entrepreneurship Debate)
UNDERGRADUATE PROGRAMMES

Academic Programmes

ET9131 Entrepreneurship and Marketing for New Ventures
ET9132 Entrepreneurial Accounting and Finance
ET9133 Managing New & Ongoing Ventures
ET9134 Enterprise Strategy
ET9135 Business Venture Implementation

*New - Undergraduate Immersion Programme (UGI)
Salient Points of MiE

**Leadership training and team-bonding** course at Outward Bound School.

**Learn from the experts**: Academics, entrepreneurs, business leaders, and professionals.

**Inter-disciplinary**: Students from different Schools/Disciplines

Participate in many creative events and **network with successful entrepreneurs**

**Overseas Immersion programme** In Silicon Valley
Undergraduate programmes offered by NTC

- Minor in Entrepreneurship (MiE)
- Introduction to Entrepreneurship (ET9121)
- E-Startups and Social Media Strategies (ET9122)
- Bio-Entrepreneurship (BS3006)
- Enterprise and Innovation (ET0001)
- Enterprise, Innovation and Leadership (elective for USP and new elective for CN Yang program)
MiE SPEAKER SERIES

TECHNOLOGY & SOCIAL ENTERPRISE

by

Clair Deevy
Head of Citizenship
Microsoft

Synopsis

Social Enterprises are disrupting the way we traditionally look at the roles of business and community organisations and are cropping up all across this region.

Based on experience across Asia Pacific, Clair will discuss the role technology is playing in enabling these organizations, what has been critical to the ones which have succeeded and the role Microsoft is playing to encourage and support social enterprises.

27th March 2014
6.30pm - 9.00pm
Nanyang Technopreneurship Center
*Light dinner will be provided

Clair Deevy
Microsoft
Head of Citizenship

Clair Deevy is the head of Citizenship in Microsoft in the Asia Pacific Region. She has more than 15 years’ experience as a communication and corporate social responsibility specialist.

Heavily involved in volunteerism, she has experience in fundraising, awareness building, entrepreneurship and technology.

Organised by

Nanyang Technopreneurship Center

Keen in Entrepreneurship? Apply for the MiE Program today!
BE ENTERPRISING IN A PROFESSIONAL CAREER

PROFESSOR FREDDY BOEY
NTU DEPUTY PRESIDENT AND PROVOST

NANYANG TECHNOPRENEURSHIP CENTER

LITE BITES
LEADERSHIP IN TECHNOLOGY ENTREPRENEURSHIP

SPECIAL THANKS TO:
KFC, EXCLUSIVE SPONSOR
NOW ON CAMPUS, LOCALED AT NORTH SPINE
$5m gift to help NTU groom entrepreneurs

PROPERTY tycoon and Singapore Chinese Chamber of Commerce and Industry president Chua Thian Poh (right) gave $5 million yesterday to the Nanyang Technological University (NTU) to set up an entrepreneurship education fund.

The gift will be matched dollar-for-dollar by the Government.

The $10 million kitty will fund overseas immersion programmes for NTU master's students in technopreneurship and innovation, facilitate visits of successful entrepreneurs to the university for lectures, support a fellowship for enterprising faculty members and help develop a university-wide entrepreneurship education programme.

"I hope that this fund will be useful in nurturing an orchard of opportunities to help groom talent for local enterprises," said Mr Chua, who is chairman and chief executive of property developer Ho Bee Group.

This is his first donation to the university.

NTU president Su Guaning said the gift served to "light a fire" for entrepreneurship development. "We will need to raise more, but as the lead gift, Mr Chua's is the most important."

He added that NTU would sign a memorandum of understanding next month for the university to become the first Kauffman Campus in Asia.

The Kansas-based Ewing Marion Kauffman Foundation funds entrepreneurship research, development and education programmes in the United States.

Universities like Washington University in St Louis, Purdue University and Georgetown University are among its Kauffman Campuses, which receive grants to train their students in entrepreneurship.

While its Constitution prohibits funding universities outside the US, the foundation will provide advice on designing NTU's entrepreneurship education programmes, Dr Su said.

GRACE CHUA
Social Entrepreneurship, Public Service and an Enterprising Mindset

Presents Distinguished Speakers

PROFESSOR THOMAS EHRLICH

Professor Thomas was previously:

◇ President, Indiana University
◇ Provost, University of Pennsylvania
◇ Dean, Stanford Law School

ERNESTINE FU

◇ Youngest Venture Capitalist in Silicon Valley
◇ Featured on front cover of Forbes Magazine as an All-star Entrepreneur
#startathon

hackathon | makeathon | futurology

THE 26-HOUR CHALLENGE
7 - 8 March 2014
@ *Scape The Ground Theatre
Train-the-trainers (ITE Instructors)
Work with international team members through virtual platforms on semester-long consulting projects for clients from global technology clusters.
A collaboration between:

EMBASSY OF THE UNITED STATES
SINGAPORE

The U.S. Embassy in Singapore will issue a grant to fund FOUR entrepreneurs to travel to the Global Entrepreneurship Summit (GES) in Kuala Lumpur, Malaysia in October 2013.

The three entrepreneurs mentioned are categorized as follows:

- Best Young/ Student Entrepreneur
- Best Female Entrepreneur
- Best Overall Entrepreneur

Details of the Global Entrepreneurship Summit (GES) 2013:

Dates: 11 - 12 October 2013
Venue: Kuala Lumpur Conventions Center, Malaysia
Smart Living Challenge

Collaboration with the Swedish Embassy

- http://www.youtube.com/watch?v=7eulZgyb2Ug&feature=youtu.be

SMART LIVING CHALLENGE
TUESDAY, 3RD JUNE 2014
NANYANG TECHNOPRENEURSHIP CENTER
Make a meaningful difference to humanity

BE A GLOBAL ENTREPRENEUR
Course Overview

**TP6007 Seminars on Special Topics in Technopreneurship**

**TP6104 Entrepreneurship Case Study Project**

**TP6010 Developing New Business Models (Business Plan)**

B1 Preparatory Accounting
B2 Preparatory Finance
TP6001 Entrepreneurship & Business Planning
TP6002 New Venture & Entrepreneurial Marketing
TP6003 Venture Capital Financing
TP6004 Intellectual Property & Technology Evaluation & Commercialization
TP8001 Accounting for New & Ongoing Venture
TP8002 Strategic Human Resource Management for New & Ongoing Ventures
TP6006 Strategic Management for New Ventures & Technology Firms
TP6008 New Venture Creation: Implementing Business Strategy
TP6009 New Venture Creation: Managing Growth
TP6101 Technology, Innovation & Design
TP6102 Sustainable Leadership & Strategy Innovation
TP6103 Corporate Finance & Merger & Acquisition

US Immersion / Other countries (Optional)
• Unique curriculum and pedagogy
• Entrepreneurship Simulation and Experiential Learning
• Pool of talented teachers/facilitators
• Overseas immersion programme
• Entrepreneur fast track programme at Stanford University
• NTC Silicon Valley Entrepreneurship Forum
• A whole educational eco-system

www.ntu.edu.sg/ntc
Collaborations with professional bodies

- ASME
  For Entrepreneurs By Entrepreneurs

- ICSB
  International Council for Small Business

- Asia Marketing Federation

- THE INSTITUTION OF ENGINEERS SINGAPORE

- Singapore Business Federation
  Apex Business Chamber

- Singapore Chinese Chamber of Commerce & Industry
Collaborations with Government Agencies

- Seed Funding
- NTC Silicon Valley Entrepreneurship Forum

- Spring-NTU High Potential Leadership course for SMEs 2014

- Course Partner 2014

- Sponsorship for Ideas Inc

- Singapore Training Development Alliance

- Curating Partner
Some institutions that NTC collaborates with

- Stanford University
- Swissnex Singapore
- Kauffman
- EMLyon Business School
- KPMG
- European Forum for Entrepreneurship Research
- Tsinghua University
- Peking University
- Kellogg School of Management
- Kellogg Innovation Network
“Teachers are brain changers”

Minister Heng Swee Kiat, Minister of Education, Singapore
Speaking at the opening ceremony of the ASAIHL 2015 Conference
(Association of Southeast Asian Institutes of Higher Learning)

9.30 am, Thursday, December 4, 2015
The World is Changing;
Are you?
The World is Changing; 
Are you?

If you are not one step ahead, 
You are two steps behind

Jack Welch, former CEO, General Electric
Words of Wisdom

You must be the change you wish to see in this world.

Mahatma Gandhi

Holistic; Optimistic; Outstanding; Integrity

Hooi Den Huan
Director
Nanyang Technopreneurship Center
“Teachers are also change makers of change makers”
LET’S MAKE A DIFFERENCE TO HUMANITY!