How to dance with Panda?
Understanding Vocational Education Market in China

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Road Map

• Motivations
• Chinese vocational education sector
• Current market condition
• From Export Ready to compatibility
Part I: Motivations
Motivations

• Sino-Finland Cooperation in Education
  – Internationalization in Finland (Cai, Hölttä & Lindholm, 2013)
    • Focusing on strategy; legislation and polices; Objectives for exporting education; Advantages of Finland
  – Finland is not EXPORT READY (Cai, Hölttä, & Kivistö, 2012): one dimension concept
    • Export competence: experiences of export education is minimal; and known knowledge of education market is not much
    • Management commitment: Attitude is diverse from strong support to little doubt: commitment is considered to be low
    • Export coordination at institutional, national, and international level is insufficient

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Motivations

• Sino-Finland Cooperation in Education
  – Internationalization in China *(Cai, Hölttä & Lindholm, 2013)*
    • Focusing on *(Cai & Hölttä, 2013)*
      – Legislation and policy milestones
      – Reasons for participation
      – Challenges and future perspectives of China’s internationalization
    • **Fit in** policy objectives and practical approaches for internationalization *(Cai & Hölttä, 2013): two dimension concept

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Motivations

• Knowledge gap in existing literature
  – Lack of discussion about how to improve Export Readiness by understanding
    • Current Chinese market condition
    • Existing cooperation and opportunities in Chinese international education market
  – Lack of discussion about Chinese vocational market
    • Cai, Hölttä & Lindholm (2013) discussed a tripartite model of cooperation in vocational education sector
  – Lack of discussion about compatibility between systems and institutions
    • From export readiness to compatibility
    • From one-dimensional to two-dimensional discussion
Motivations

• **Purpose of the presentation**
  – Understanding the main characteristics of Chinese vocational sector
  – Understanding the current Chinese vocational market situation
  – Discussing the compatibility between Chinese and Finnish education sector

• **Expected outcomes**
  – Generating interests in cooperating with Chinese vocational sector
  – Setting up a platform for future cooperation
Part II:
Chinese Vocational Education Sector
SEVEN Characteristics of Chinese Vocational Sector

C1: Having multiple levels and diverse origins

C2: Expanding quickly in an unbalanced manner

C3: Facing high demand

C4: Operating in complex regulatory environment

C5: Being under-funded by government

C6: Growing differentiation within sector

C7: Experiencing constant transformation
C1: Having multiple levels and diverse origins

- General Education
- Vocational Education
- Adult Education

3-year Doctoral Programs

- 3-year Master Programs

University 4-year Normal Courses

University 3-year Short-cycle Courses

Higher Vocational 3-year Colleges

Higher Specialized Vocational Colleges

Senior Secondary Schools (3-year)

Vocational High School (Zhi Gao)

Secondary Specialized Schools (Zhong Zhan)

Skilled Workers' School (Ji Xiao)

Junior Secondary Schools (3-year)

Junior Secondary Technical Vocational Schools (3-year)

Primary Schools (6-year)

Kindergartens and Pre-schools

On-the-job Training

Postgraduate Studies

University 4-year Normal Courses

University 3-year Short-cycle Courses

Adult Secondary Specialized Schools

Adult Senior Secondary General

Adult Training Schools

Adult Technical Training Schools

Adult Junior Secondary Schools

Literacy Classes
• Vocational colleges dominant the tertiary education expansion since late 1990s

C2: Expanding quickly in an unbalanced manner

- Enrollment expansion (2003-2005)
- Differentiating and appearing of elite vocational institutions (2006-to date)
Institution Expansion (absolute number)

- Rapid expansion in 15 years: from 100 to 1200 colleges
- U.S. took 80 years to reach 1200 colleges

Number of vocational colleges in China (1995-2009)

Number of community colleges in U.S. (1915-2011)


Source: Chinese Statistics Yearbooks
C2: Expanding quickly in an unbalanced manner

- **Institution Expansion (relative share)**
  - Vocational colleges account for more than half of the total number of Chinese higher education institutions

![Figure 1: Number of Higher Education Institutions and Vocational Colleges](image)

Figure 1: Number of Higher Education Institutions and Vocational Colleges

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C2: Expanding quickly in an unbalanced manner

Large regional variation in enrollment expansion

2010 HE Gross Enrollment Rate by Region (%)

- Tiebet: 15%
- Yunnan: 18%
- Sichuan: 25%
- Guangdong: 28%
- Jiangsu: 40%
- Zhejiang: 45%
- Shanghai: 60%
- Beijing: 60%

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Vocational enrollment as % of total enrollment in China

• U.S.: CC enrollment as **44%** of all U.S. undergraduates in 2008
• China: **45%** in 2004 and **74%** in 2009

Source: Chinese Statistics Yearbooks
Employment rate keeps at high level

- From 80% in 2006 to 83% in 2012 and 82.5% in 2013
C4: Operating in complex regulatory environment

Regulatory Body for Vocational Education

State Council

- Ministry of Education
  - Bureau for Vocational and Adult Education
- Ministry of Finance
  - Bureau for Education, Science, and Culture
- Ministry of Human Resources and Social Security
  - Bureau for Employment Enhancement
- Bureau for Vocational Capacity Development
- State Development and Reform Commission
  - Bureau for Development Planning

Maybe more complicated after the State Council reform in June 2014
C5: Being under-funded by government

- Changing funding composition in a decentralized system
  - China: tuitions account for 22% of per student expenditure, government appropriation 45%
  - U.S. community college: tuition accounts for 16%; federal funds 14%; state funds 36%; local funds 19%

Source: Chinese Statistics Yearbooks
C5: Being under-funded by government

Government allocation varies by region

Chart 1 Per Student Expenditure of Vocational Colleges in 2009

<table>
<thead>
<tr>
<th>Region</th>
<th>Per student expenditure</th>
<th>Per student fiscal allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunan</td>
<td>8211</td>
<td>2816</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>9413</td>
<td>2616</td>
</tr>
<tr>
<td>Guangxi</td>
<td>10942</td>
<td>2979</td>
</tr>
<tr>
<td>Nation</td>
<td>11578</td>
<td>3871</td>
</tr>
<tr>
<td>Hainan</td>
<td>12513</td>
<td>2699</td>
</tr>
<tr>
<td>Fujian</td>
<td>13190</td>
<td>2658</td>
</tr>
<tr>
<td>Guangdong</td>
<td>16800</td>
<td>5643</td>
</tr>
</tbody>
</table>

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• Developing Exemplary and Key vocational colleges
  – Elite vocational institutions (200 colleges by 2012)
C7: Experiencing constant transformation

• Changing Development Patterns
  – Model 1: High public expenditure-low enrollment share
  – Model 2: Low public expenditure-low enrollment share
  – Model 3: Low public expenditure-high enrollment share

<table>
<thead>
<tr>
<th>Government appropriation as % of total expenditure</th>
<th>Vocational enrollment as % of total undergraduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 60%</td>
<td>1993-1999 (Model 1)</td>
</tr>
<tr>
<td>Under 60%</td>
<td>1999-2005 (Model 2)</td>
</tr>
<tr>
<td></td>
<td>2005-to date (Model 3)</td>
</tr>
</tbody>
</table>

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Adopting employability as new mission

- Macro: Transforming from social institution to industry under the neo-liberal arguments for globalization (Yang & Lin, 2013)

**Shifting legitimacy base**

From enrollment-absorbing agency to employment-enhancing institution
C7: Experiencing constant transformation

- Adopting employability as new mission
  - Micro: Changing program goal, program development, curriculum development, dominant pedagogy, faculty development, and internal management at department level (Yang & Lin, 2013)
C7: Experiencing constant transformation

First-tier Institution (Selective 4-year Public Institutions)
- Project 985-No. 39
- Project 211-No. 112
- Research intensive

Second-tier Institution (Non-selective 4-year Public & Private Institutions)
- Teaching intensive; No. 600+

Third-tier Institution (4-year Independent Colleges, Private)
- No. 600+, Teaching intensive; switch to polytechnic, award B.A.

Third-tier Institution (3-year Vocational Colleges)
- No. 1200+, community college, award A.A.

Changing composition

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Part III: Current Market Condition
Current Market Condition

- Demographic forecast
  - A shrinking pool of candidates for vocational HEIs

Figure 1: Changes in Student Population in China (2000-2050)
Current Market Condition

• Trends and demand for international education
  – Increasing number of Chinese students studying overseas

Chart 1 Number of International Students from China

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>413,600</td>
</tr>
<tr>
<td>2011</td>
<td>339,700</td>
</tr>
<tr>
<td>2010</td>
<td>284,700</td>
</tr>
<tr>
<td>2009</td>
<td>229,300</td>
</tr>
<tr>
<td>2008</td>
<td>179,800</td>
</tr>
<tr>
<td>2007</td>
<td>144,500</td>
</tr>
<tr>
<td>2006</td>
<td>134,000</td>
</tr>
</tbody>
</table>

Current Market Condition

5-6% are interested in vocational degree (AA)

Chart 1 Interested Degree Level

Source: EIC 2013 Report on Chinese Student’s Intention to Study Abroad.

Diverse interests

Source: EIC 2013 Report on Chinese Student’s Intention to Study Abroad.
Current Market Condition

Mainly interested in Business, Engineering and Humanities majors

Chart 1 Interested Majors for Chinese Students

Source: EIC 2013 Report on Chinese Student’s Intention to Study Abroad.

Source: EIC 2013 Report on Chinese Student’s Intention to Study Abroad.
Current Market Condition

Mainly interested in English-speaking countries such as U.S. and U.K. and Australia

Chart 1 Interested Countries for All Education Levels in 2013

Current Market Condition

Children from Middle-class families become the new majority

Chart 1 Household Annual Income for Families Interested in Study Abroad

Source: EIC 2013 Report on Chinese Student’s Intention to Study Abroad.

Source: EIC 2013 Report on Chinese Student’s Intention to Study Abroad.
Current Market Condition

• Key Chinese Players
  – Vocational institutions
    • **TWO TYPES:** Including Higher vocational colleges (*gao zhi*) and higher specialized colleges (*gao zhuàn*)
    • **TWO PROGRAMS:** provide both three-year and five-year programs
    • **MOST PUBLIC:** 22% were private institutions
  – Governmental body
    • Five ministries are governing the operation of vocational colleges
  – Sector body
    • Professional organizations and industry organizations
    • Sector bodies are weak in lobbying and taking initiative in international education collaboration
  – Private body
    • Private bodies are more interested in career training and partnering with domestic institutions
Current Market Condition

• Key international players

  – Australia
    • Agency: Australian Education International (AEI) & Australian Trade Commission (Austrade)
      – Three major delivery models of Australian vocational education in China are twinning programs, alliance in vocational education and training, and pathway and foundation programs

  – Germany
    • Agency: German Academic Exchange Service (DAAD) & Gesellschaft fuer Technische Zusammenarbeit (GTZ)
      – During the first phase (1982), German support focused on developing new training institutions at grassroots level
      – During the 1990s, the focus shifted to the qualification of vocational school teachers
      – The third phase (1999) concentrated on the integration of disadvantaged groups into the labor market
      – The fourth phase focuses on building Public Private Partnerships
Current Market Condition

• Key international players
  – United Kingdom
    • Agency: British Council
    • Aiming at improving curriculum, institutional capacity and leadership in vocational institutions, and introduce British vocational qualifications to China; also participating in twinning programs and pathway and foundation programs in China
  – European Union
    • Agency: EuropeAid-funded Asia-Link Programme
    • Projects related to materials and curriculum design; addressing skills gaps for both vocational training and traditional higher education program; China-Europe Vocational Education Platform
  – United States
    • Agency: EducationUSA & American Association of Community Colleges
    • Promotes international exchanges between US and Chinese vocational institutions through multiple programs
Current Market Condition

• Transnational delivery of vocational education
  – Type I: Recruiting Chinese students
    – Recruitment through academic partnership
    – Partnering with private high schools
    – Recruit from vocational high schools
    – Partnership with education agencies
    – Direct student recruitment
## Current Market Condition

### Type II: Delivery of programs and services in China

<table>
<thead>
<tr>
<th>Program type</th>
<th>Chinese Diploma Issued</th>
<th>Foreign Diploma Issued</th>
<th>Provincial/Local MOE Approval Needed &amp; Expected Time</th>
<th>National MOE Notification /Approval Needed &amp; Expected Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Double award</strong></td>
<td><strong>YES.</strong> A student receives a qualification from Chinese institution.</td>
<td><strong>YES.</strong> A student receives a qualification from foreign college.</td>
<td>It depends. -Junior college level double award program require the approval of provincial MOEs.</td>
<td>It depends. -Bachelor’s degree and higher programs with double award require the approval of national MOE.</td>
</tr>
<tr>
<td><strong>Twining/articulation program</strong></td>
<td><strong>NO.</strong> No foreign degree will offer.</td>
<td><strong>YES.</strong> A student receives a qualification only from foreign college.</td>
<td>It depends. -Junior college level twining programs require the approval of provincial MOEs.</td>
<td>It depends. -Bachelor’s degree and higher level twining programs require the approval of national MOE.</td>
</tr>
</tbody>
</table>
## Current Market Condition

### Type II: Delivery of programs and services in China

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</tr>
</thead>
<tbody>
<tr>
<td>Sino-Foreign Program or College (X+Y)</td>
<td><em>It depends.</em></td>
<td><em>YES.</em></td>
<td><em>It depends.</em></td>
<td><em>It depends.</em></td>
</tr>
<tr>
<td></td>
<td>-Double award program will offer a Chinese diploma;</td>
<td>-Double award program will offer a foreign diploma;</td>
<td>-Junior college level programs require the approval of provincial MOEs.</td>
<td>-Bachelor’s degree and higher programs required the approval of national MOE before recruiting for the program may begin.</td>
</tr>
<tr>
<td></td>
<td>-Twining program will not issue Chinese diploma.</td>
<td>-Twining program will also issue foreign diploma.</td>
<td>-Programs that do not offer foreign degrees required provincial MOE approval.</td>
<td></td>
</tr>
<tr>
<td>Inter-University Exchange Program</td>
<td><em>YES.</em></td>
<td><em>It depends.</em></td>
<td><em>NO.</em></td>
<td><em>NO.</em></td>
</tr>
<tr>
<td></td>
<td>-After graduation, student earns a Chinese diploma/degree.</td>
<td>-Whether a student earns a foreign diploma or degree is up to the foreign institution to determine.</td>
<td>-Contract (MOU) is filled with provincial MOEs. MOE approval is not required.</td>
<td>-Contract (MOU) is filled with provincial MOEs. National MOE approval is not required.</td>
</tr>
</tbody>
</table>

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Current Market Condition

– Example: Sino-Canada Programs [from aid to trade]

• Canadian College Partnership Program, 1994-2012
  • The purpose of the CCPP is to increase the capacity of developing country partners, in collaboration with Canadian colleges, institutes, CEGEPs, university colleges and polytechnics, to address the development needs of the communities they serve

• Vocational Education Leadership Training Program, 2009-2013
  • The VELT program is a five year program sponsored by the China Education Association for International Exchange (CEAIE) with full financial support from the Ministry of Education, China

• Canadian Trade Commissioner Service in Action, 2011-to date

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Current Market Condition

- **Example:** Successful Sino-Canada Program Characteristics

  - **Program fit [Type II]**
    - Programs which are in line with Chinese colleges’ specialty
    - Programs which are the best offers of Canadian colleges
    - Programs which have better labor market perspectives
    - Programs which follow municipal or provincial strategic plan

  - **Cooperation model [Type II]**
    - Associate degree or college diploma level: “2+1” program
    - Bachelor’s degree level: “3+1” program
    - Multiple degree level: “3+0” and “3+2” program

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Current Market Condition

• Lessons learned from Sino-Foreign Programs
  – A strong and integrated federal-level public agency is needed as an overarching organization to coordinate efforts for international student recruiting and establishment of international
  – Significant funding and intensive marketing are required for successful collaboration with Chinese partners
  – The key for mutual trust and long-term success in Chinese vocational market is introducing a step-by-step approach with strategic planning
  – Choosing programs that satisfy current needs of China and offering a diversified program package

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Part IV: Compatibility: A Finnish Education Made in China?
Compatibility

- In order to understand the compatibility between Chinese and Finnish higher education
  - Need to understand system compatibility
  - Need to understand institution compatibility
Compatibility

- Framework for assessing system compatibility
  - System structure

CHINA: Pyramid, large and stratified

Finland: Inverse Pyramid, small and homogenous
Compatibility

• Framework for assessing system compatibility
  – Ideological orientation
    • China: Pursuing excellence through differentiation
    • Finland: Pursuing excellence through equalization?
  – Development stage
    • China: mass higher education, gross enrollment rate around 27% (2011, 1.351 billion population)
    • Finland: high participation, gross enrollment rate around 96% (2011, 5.4 million population)
Compatibility

• Framework for assessing system compatibility
  – Governance model
    • China: highly decentralized, provincial governments and sector bodies play significant roles
    • Finland: centralized?
  – Funding
    • China: revenue diversification through cost-sharing, declining share of government input
    • Finland: government finances higher education

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Compatibility

• Framework for assessing institution compatibility
  – Institutional characteristics
    • Institution mission
    • Institution revenue and expenditure structure
    • Institution selectivity
  – Teaching and learning
    • Curriculum and pedagogy
    • Student enrollment pattern
    • Student learning module and participation in online course
    • Student assessment
    • Faculty ability and student-faculty interaction
  – Prior experience in international activities
Further information


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