International Trends in U.S. Graduate Education

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Finnish Higher Education Experts Study Tour
October 26, 2009
Overview of Presentation

1. International Students and U.S. Graduate Programs: Applications and Admissions
   • Fall 2009 data from CGS “International II” Surveys
   • Implications for U.S. graduate education

2. International Collaborations involving U.S. Graduate Institutions
   • Overview of CGS Graduate International Collaborations Project (GICP)
   • 2008-9 data on graduate-level joint and dual degree programs with non-U.S. institutions
   • Activities to develop understanding of key issues
Part I: Applications and Admissions of International Students

CGS International Graduate Admissions Survey*

• Conducted 3 times/year since 2004
  ▪ Phase I: Initial Applications (February)
  ▪ Phase II: Final Applications and Initial Offers of Admission (June)
  ▪ Phase III: Final Offers of Admission, and First-Time and Total Enrollment (September)

• Data collected for international grad students only

• Survey universe: All U.S. CGS member institutions

* Data collected and analyzed by Nathan Bell, CGS Director of Research, nbell@cgs.nche.edu
Data Collected

- Final applications data for fall 2008 and fall 2009
- Initial offers of admission for same period
- Applications and admissions data collected for:
  - 4 selected countries/regions of origin – China, India, Korea, Middle East
  - 8 broad fields – Business, Education, Engineering, Arts & Humanities, Life Sciences, Physical & Earth Sciences, Social Sciences, ‘Other’ Fields
Phase II Findings: Applications

- 4% increase in 2009 (follows a 6% increase in 2008)
- Lowest increase since 2006 when declines of the previous 2 years were reversed.
- Despite increases, international applications still below 2003 levels at about 60% of responding institutions
Applications by Country of Origin

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</thead>
<tbody>
<tr>
<td>China</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>India</td>
<td>2%</td>
<td>-12%</td>
</tr>
<tr>
<td>South Korea</td>
<td>2%</td>
<td>-9%</td>
</tr>
<tr>
<td>Middle East</td>
<td>14%</td>
<td>22%</td>
</tr>
</tbody>
</table>
Applications by Broad Field

- Business: 10% to 7% (2007 to 2008), 7% (2008 to 2009)
- Education: 8% (2007 to 2008), -1% (2008 to 2009)
- Engineering: 4% (2007 to 2008), 3% (2008 to 2009)
- Humanities/Arts: 7% to 7% (2007 to 2008), 5% (2008 to 2009)
- Life Sciences: 3% (2007 to 2008), 0% (2008 to 2009)
- Physical Sciences: 7% to 2% (2007 to 2008), 2% (2008 to 2009)
- Social Sciences: 9% to 6% (2007 to 2008), 9% (2008 to 2009)
- Other Fields: -2% (2007 to 2008), 11% (2008 to 2009)
Phase II Findings: Admissions

- Initial admissions offers down 3% in 2009 (follows 3% increase last year)
- At 49% of responding institutions, admissions offers are below 2003 numbers
Offers of Admission by Country

China: 2007 to 2008, 15%; 2008 to 2009, 13%
India: 2007 to 2008, 10%; 2008 to 2009, -2%
South Korea: 2007 to 2008, -16%; 2008 to 2009, -2%
Middle East: 2007 to 2008, 13%; 2008 to 2009, 10%
Offers of Admission by Field

- Education: 5% (2007-2008), 5% (2008-2009)
- Engineering: 0% (2007-2008), 0% (2008-2009)
- Humanities/Arts: -1% (2007-2008), -1% (2008-2009)
- Physical Sciences: 9% (2007-2008), 1% (2008-2009)
- Other Fields: 5% (2007-2008), 5% (2008-2009)
Summary and Implications

- Rates of increase for applications slowed down in 2009, and initial offers of admission declined.
- Applications and offers of admission are still below 2003 levels at many institutions.
- U.S. graduate schools will need to make greater efforts if they are to increase international applications and admits.
Responses from U.S. Graduate Schools and Graduate Deans

- 75% of U.S. graduate schools enhanced outreach to international students since 9/11
- Outreach activities: call centers, enhanced use of electronic applications, international student academic counselors
- 58% of U.S. graduate schools report international exchange partnerships

Part II: International Collaborations at U.S. Graduate Institutions

The 2007 and 2008 Phase II surveys also asked institutions to report

1. Types of international collaborations, especially joint and dual degree programs
2. Definitions used for these programs
3. Partner countries
4. Plans for establishing new programs within the next two years
Results: Interest and Engagement in International Joint & Dual Degrees is Growing

<table>
<thead>
<tr>
<th>Degree Type</th>
<th>2007*</th>
<th>2008**</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Established Programs with International Universities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual/Double Degree Programs</td>
<td>32%</td>
<td>51%</td>
<td>+19</td>
</tr>
<tr>
<td>Joint Degree Programs</td>
<td>3%</td>
<td>14%</td>
<td>+11</td>
</tr>
<tr>
<td><strong>Plans to Establish New Programs with International Universities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual/Double Degree Programs</td>
<td>3%</td>
<td>33%</td>
<td>+30</td>
</tr>
<tr>
<td>Joint Degree Programs</td>
<td>9%</td>
<td>11%</td>
<td>+2</td>
</tr>
</tbody>
</table>

The Majority of Collaborative Graduate Degree Programs are Master’s Level Established With Universities in Europe, China, and India

Countries/Regions of International Universities With Which U.S. Graduate Schools Have Established Collaborate Graduate Degree Programs

N = 177 respondent institutions; 37 reported dual degrees; 18 reported joint degrees

Collaborative Degree Programs Have Been Established in a Variety of STEM Fields, Though Business is the Most Common

Fields of Study in Which U.S. Graduate Schools Have Offered Collaborative Master's and Doctoral Degree Programs With International Universities

- Business: 39%
- Engineering: 26%
- Social Sciences: 15%
- Life Sciences: 15%
- Physical Sciences: 19%
- All Others: 0%

Source: 2008 Council of Graduate Schools Graduate Admissions Survey II: Final Applications and Initial Offers of Admission.

N = 177 respondent institutions; 37 reported dual degrees; 18 reported joint degrees
CGS Response: Graduate International Collaborations Project

- NSF grant-funded project to identify policies and practices that foster, or inhibit, successful international collaborations in graduate education, including research and formal (e.g. joint and dual) degree collaborations.

- Activities:
  - Focus Group Research
  - Survey (valid responses from 43 institutions, reported on 168 programs)
  - Workshops and Meetings
  - White Paper and Publication
Topics Covered by Survey on Joint and Dual Degrees

• Selection of international partners
• Motivations and perceived benefits
• Accreditation and approval processes
• Typical sources of funding
• Student and faculty mobility
• Challenges and concerns
• Role of Graduate Dean in overcoming challenges
How are partners typically chosen in your joint and dual degree programs?

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Known contacts among faculty/existing faculty partnerships</td>
<td>58.1%</td>
</tr>
<tr>
<td>Existing partner through an already established program</td>
<td>23.3%</td>
</tr>
<tr>
<td>Strategic decision to pick a new partner</td>
<td>16.3%</td>
</tr>
<tr>
<td>Other</td>
<td>2.3% (“Approached by foreign institution”)</td>
</tr>
</tbody>
</table>
What are the primary motivations for your institution to partner with an international institution on joint or dual degree programs?

- Attract international students (84%)
- Faculty Interest (81%)
- Strengthen Academic Research Quality (77%)
- Administrative Interest in Internationalizing the Institution (77%)
- Increase Prestige (51%)
- Increase Revenue (44%)
- Employer/Industry Demand (35%)
- Other (16%)
  - Provide International Experience for Students (N=2)
  - International Relations/Outreach (N=2)
How are Your Programs Funded?

(\% = percentage of respondents)

1. • Retention of student fees generated by the program (67.4\%)

2. • Internal university budget (60.5\%)
   • International sources (partner’s institution or government) (60.5\%)

3. • State or U.S. federal government (e.g. FIPSE) (18.6\%)

4. • Employer industry funding (9.3\%)
   • Private funding (e.g. foundation) (9.3\%)
   • Other (9.3\%)
# Student Mobility

Which of the following best describes overall student mobility in your programs?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>More international students travel to our US institution than vice versa</td>
<td>64.1%</td>
</tr>
<tr>
<td>More US students travel to international partner institution than vice versa</td>
<td>10.3%</td>
</tr>
<tr>
<td>Domestic &amp; international student travel in program is about even</td>
<td>10.3%</td>
</tr>
<tr>
<td>N/A (program still in development)</td>
<td>15.4%</td>
</tr>
</tbody>
</table>
**Faculty Mobility**

Do your faculty travel between institutions for the purpose of teaching and/or research?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Yes, typically</td>
<td>51.2</td>
</tr>
<tr>
<td>Yes, occasionally or in some programs</td>
<td>39</td>
</tr>
<tr>
<td>No</td>
<td>9.8</td>
</tr>
</tbody>
</table>
A more strategic approach to developing graduate-level programs?

• Increasing efforts to ensure that the collaboration supports the institution’s strategic research interests

• Shift from a “bottom up,” faculty-driven model to a cooperative effort between faculty and administration

• Increasing interest in “best practice” research to ensure successful start-up, implementation, and sustainability of programs
Upcoming data and projects

- **GICP Publication** including final data analysis and best practice guidelines (forthcoming January 2010)

- **CGS Strategic Leaders Global Summit**, an international meeting to explore best practice guidelines in international collaborations, will take place in December 2009 and the proceedings will be published in Spring 2010.
Further Sources on CGS International Projects


• CGS Publications:
  o Global Perspectives on Graduate Education (2008)
  o Global Perspectives on Research Ethics and Scholarly Integrity (2009)

• GICP contacts:
  Daniel Denecke, ddenecke@cgs.nche.edu and Julia Kent, jkent@cgs.nche.edu