TRENDS IN PARTICIPATION AND ATTAINMENT OF CHINESE STUDENTS IN UK HIGHER EDUCATION

Professor Cristina Iannelli
University of Edinburgh
Outline

- Background to the study: the internationalisation of higher education (HE)
- Research questions and main factors analysed
- Changes in the Chinese HE system
- The HESA data
- Trends in patterns of participation and attainment
- Summary of the main findings and implications for HE policy and practice
Internationalisation of higher education

- The internationalisation of higher education has become a worldwide phenomenon.
- According to UNESCO estimates, about 3.6 million students are studying abroad and these estimates are expected to reach 7 million in 2020 (British Council 2004).
- According to HESA data, about 425,000 international students are enrolled in UK HE institutions.
- The number of Chinese overseas students studying in the UK has increased from 4,000 in 1998/99 to about 84,000 in 2012/13.
Internationalisation of higher education (cont.)

- National governments have promoted student mobility for different policy reasons (OECD 2004):
  - to promote ‘mutual understanding’
  - to support ‘skilled migration’
  - to increase ‘revenue generation’ for HE institutions
  - to foster ‘capacity building’

  UK – in regard to non-EU students

  China
Our study (Iannelli, C. and Huang, J. 2013)

• Our paper aimed at studying changes in Chinese overseas students’ demand for HE and in their academic outcomes in the UK

• We addressed two main research questions:
  • Has the large increase in the numbers of Chinese overseas students in UK HE institutions brought about changes in patterns of participation of Chinese students?
  • Have levels of first degree attainment among Chinese overseas students changed over time? To what extent do they differ from attainment levels of British students and other international students?
Main factors analysed

• With regards to patterns of participation we analysed:
  • Types of institution entered
  • Field of study
• With regards to attainment we analysed first-degree attainment:
  • First class
  • Upper-second class
  • Lower-second class
  • Third class
  • Unclassified

} Good degree
Changes in higher education in China

- Rapid and extensive expansion of the Chinese HE system
- In 1999 government target was: 15% of young people aged 18-21 enrolling in HE by 2010. In 2002 this target was reached
- Increasing institutional differentiation: the identification of the top universities of ‘Project 211’ and ‘Project 985’

- Despite these changes:
  - Recruitment into HE continues to be very selective, based on the national HE entrance examination
  - The choice of subject at secondary level is affected by the availability of courses in the universities (the ratio of Arts and Science courses offered in the universities is around 3:7)
‘Push’ factors in the decision of studying abroad

• High competition to enter HE institutions at home
• Increasing dissatisfaction of Chinese students with
  • the unprecedented crowded environment of the Chinese HE system, and
  • the quality of curriculum and teaching methods in Chinese universities
• High labour market competition among graduates
• The availability of economic resources among Chinese families to invest in their children’s education
• The growing availability of foundation courses or access courses which open up access to foreign universities

• China is now the country which sends the largest number of students abroad and English-speaking countries - the UK, the USA, Australia and Canada - have become their favourite destinations
Chinese overseas students in the UK

• In our study we analysed HESA (Higher Education Statistics Agency) data for three cohorts of graduates:

• Variables analysed:
  • gender, age, mode and level of study, institution graduated from and subject of graduation, major source of tuition fees, first degree attainment, highest qualification on entry.
Changes in Chinese students’ characteristics: Summary

- In more recent times Chinese students coming to the UK are more likely to:
  - be younger
  - be women
  - be funded by their families
  - hold A-levels/Highers before entering first-degree programmes
Changes in Chinese students’ characteristics:

**Age**

- Most of the first degree graduates were aged 21-24 with the percentage being 69%, 83% and 86% in year 98/2001, 2004/05 and 2008/09 respectively.

- Masters graduates: 42% of the Masters graduates were 30 years & over in 1998/2001 and this percentage decreased to 8% in 2008/09, while 51% of the Masters graduates were 25-29 years old in this latter period.

- PhD graduates: In 1998/2001 85% of the doctors were 30 years & over and 8% of them were 25-29 years old. The corresponding data in 2008/09 were 51% and 49% respectively.
Changes in Chinese students’ characteristics: Gender
Changes in Chinese students’ characteristics: Funding and entry qualifications

- Total percentage of self-funded Chinese students for both postgraduates and undergraduates increased from 74% to 82% over the last 10 years.
- The smallest percentage of self-sponsored graduates was among the doctorate students (about 40% over the three time points) and around 80% of Masters students and 90% of first-degree students were self-sponsored.
- The data on entry qualifications are limited. However, the HESA data show that the percentage of Chinese first-degree graduates who held A-levels/Highers doubled in recent years, rising from 10% to 20%.
Trends in participation – Institution type

• Most Chinese first-degree students graduated from post-92 universities. However, this percentage is declining in favour of the Russell Group universities and the pre-92 universities
• About 40% of Masters students graduated from a Russell Group university. Over time there has been an increase in the percentages of Masters students who graduated from the pre-1992 universities
• The Russell Group universities consistently gathered the largest percentage of Chinese PhD students
Chinese graduates from different HE institutions

![Bar chart showing the percentage of Chinese graduates from different HE institutions over different years for First degree, Master, and Doctorate levels. The chart includes bars for Colleges, Post-1992 university, Pre-1992 university, and Russell group.]
Trends in participation – Field of study

• At the beginning of the 21st century, favoured subjects among undergraduate Chinese students in UK HE were business and engineering.
• Over time business (but also science) has grown in popularity while engineering has attracted fewer Chinese undergraduate students.
• At Masters level business and social science were the most popular subjects in the 10 years under investigation.
• Engineering and science attracted the majority of Chinese PhD students but less so in more recent years.
• Noteworthy is the growth in the percentages of graduates in social science at both undergraduate and PhD level.
Chinese first-degree graduates by (selected) fields of study

percentages

- Science
- Computer science
- Engineering
- Social study
- Business

1998/2001
2004/05
2008/09
Chinese Masters graduates by (selected) fields of study

percentages

1998/2001
2004/05
2008/09

Science
Computer science
Engineering
Social study
Business
Chinese PhD graduates by (selected) fields of study

percentages

1998/2001
2004/05
2008/09

Science
Computer science
Engineering
Social study
Business
Trends in attainment of Chinese first-degree graduates

• Chinese graduates were more likely to obtain a lower-second-class or an upper-second-class degree
• There has been an increase in the percentage of Chinese students who achieved only a third-class degree
• Chinese students are less likely to obtain a ‘good degree’ (i.e. a first or upper-second class degree) than other foreign students and UK students and this pattern has either remained constant or, in comparison with UK and European students, worsened over time
Attainment of Chinese first-degree graduates (column percentages)

<table>
<thead>
<tr>
<th></th>
<th>1998/2001</th>
<th>2004/05</th>
<th>2008/09</th>
</tr>
</thead>
<tbody>
<tr>
<td>First class</td>
<td>5</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Upper-second class</td>
<td>24</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Lower-second class</td>
<td>50</td>
<td>44</td>
<td>43</td>
</tr>
<tr>
<td>Third class</td>
<td>14</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Unclassified</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Columns may not sum to 100% because the percentages have been rounded to the nearest whole figure.
Comparing attainment of Chinese first-degree graduates with the attainment of other graduates

Odds ratios of obtaining a ‘good degree’

- China/UK
- China/Other non-EU
- China/EU
- China/Asia
Who achieved highest among Chinese students?

- Results from a logistic regression, which compared the odds of gaining a ‘good degree’ versus the other types of degrees, show that the most successful Chinese graduates:
  - were female
  - went to Russell Group universities and pre-1992 universities
  - held A-level/Highers qualifications prior to enter a UK HE institution, and
  - in the most recent time points, were graduates from computer science, engineering, social science, humanities and science
Summary and implications

• A number of changes have accompanied the participation of Chinese overseas students in UK HE institutions:
  • Changes in student numbers
    ➢ Expansion has brought new challenges (e.g. in the areas of curriculum, pedagogical and assessment practices)
  • Changes in student composition
    ➢ New waves of Chinese students are likely to require a strong pastoral support and academic guidance
  • Changes in patterns of participation
    ➢ There is a need for a better knowledge of the situation of HE and labour market in China
Summary and implications (cont.)

- Stability in Chinese students’ low attainment
  - What are the difficulties? Language barriers or more difficult adaptation to the UK HE system? The experience of Chinese students with A-levels/Highers prior to entering HE suggest the importance of ‘pre-arrival’ induction programmes

- Monitoring participation of Chinese students is crucial because it allows universities to capture the changing expectations of Chinese students and to be responsive to these changes

- The ability to understand international students’ current and predicted future demands is key if policymakers want to support the UK HE system in continuing to play a leading role internationally
References


