Experiences from University of Nottingham Ningbo

Chris Rudd
Provost, University of Nottingham Ningbo China
Ningbo City (宁波市)

- Sub Provincial City in Zhejiang Province
- Population c.8.5M with c.4M in metro area
- One of the busiest Ports in the world and starting point for the Marine Silk route.
- Birthplace of Chiang Kai Shek
- Historically “open” and internationalised city with longstanding Jewish, Christian and Arab communities
- Close relationship with Hong Kong
- Sister City relationship with Nottingham since 2005
What is University of Nottingham Ningbo China?

- JV between UoN and WanLi Education Group
- A branch campus of UoN
- A very good “private” University
- A springboard for study overseas
- A sino-foreign collaborative University
Original Vision for UNNC

- To reproduce the Nottingham experience in China
  - Nottingham degrees, taught in English
  - Western pedagogy
- To deliver a highly internationalised education
  - Overseas faculty, mixed student population
  - Multiple study abroad opportunities
  - Interactive, small group teaching
- To build a high quality research operation
- To support China’s higher education reform
- Initial target of 4000 students, fully residential campus
... University has been offered the opportunity to participate in a Joint venture with Wanli Education group (WEG) to develop a university campus in Ningbo Zhejiang province China. This opportunity has emerged due to the new liberalised and positive approach by the Chinese government under new legislation on Sino-Foreign educational enterprises. The new campus has a target population of 4000 in the first phase (2004-2008), covering classroom based subjects in arts and social sciences at undergraduate (3000) and postgraduate (1000) levels. It has been allocated premium land (70 acres) with a further additional amount available if required.

Identified Risks in 2004

1. Political instability
2. Possibility of staff/students running foul of political authorities
3. Difficulties in regulatory environment for academic approvals
4. Difficulties in terms of administrative regulatory frameworks
5. Difficulties in the U of N/China and UK China relationship
6. Availability of high-quality academic staff.
7. Fee paying ability of Chinese students
• First cohort Sept 2004
• Now 6800 students on fully residential campus (8612 registered)
• 11% international students
• 2016/17 turnover RMB 773M (c. GBP91M)
  • 74% of this is tuition
  • FT fee RMB 90k
• 407 Academic Staff
• 322 Administrative Staff
• Research Income c.RMB 100M pa
• 345 registered PhD students
UNNC Management and Governance

UNUK

President

Provost

Party Secretary

UNNC Advisory Board

3 Faculties plus Graduate School

Central Support Services

UNNC Management Board

Party Office

Student Affairs

Wan Li Education Group

Campus Logistics

UNUK

JV Executive Board

President nominated by Chinese partner
Provost nominated by UK partner
Nottingham University
Business School
商学院
Entrepreneurship, Marketing and Management Systems
创业学、市场营销与管理系统
Finance, Accounting and Economics
金融财务、会计与经济学
International Business and Management
国际商务与管理

Faculty of Humanities and Social Sciences
人文社科学院
Language Centre 小语种语言中心
Economics 经济系
Education 教育学系
English 英语语言学与文学系
International Communications 国际传播系
International Studies 国际事务与国际关系学系

Faculty of Science and Engineering
理工学院
Aerospace 航空学院
Architecture and Built Environment 建筑和建筑环境
Chemical and Environmental Engineering 化学与环境工程
Civil Engineering 土木工程
Computer Science 计算机科学
Electrical and Electronic Engineering 电气与电子工程
Geographical Sciences 地理科学
Mathematical Sciences 数学科学
Mechanical, Materials and Manufacturing Engineering 机械、材料与制造工程
Centre for English Language Education (CELE)- preliminary year

- English for Academic Purpose (EAP) / English for Specific Academic Purpose (ESAP)
- Coaching and Support (CAS) Academic Literacy Development Centre (ALDC)
- Online materials Knowledge exchange
Faculty of Business: EQUIS accredited

All Science and Engineering programmes have been internationally accredited.
UG Curriculum Adaptations (for local students)

**IELTS 5.0**
- 1 Year Foundation studies
- UK 3 Year Bachelor Programme
- Chinese culture and ideology
- Physical Education

**IELTS 6.5**
- University of Nottingham degree
- MoE 毕业证书
- Graduate School

**Gaokao Entry**

**Standard 4+0 model**
- Year 0 - UNNC
- Year 1 - UNNC
- Year 2 - UNNC
- Year 3 - UNNC

**Standard 2+2 model**
- Year 0 - UNNC
- Year 1 - UNNC
- Year 2 - UNUK
- Year 3 - UNUK

**Study abroad option**
- Year 0 - UNNC
- Year 1 - UNNC
- Year 2 - Exchange Partner
- Year 3 - UNUK
• Domestic Undergrad and Masters recruitment restricted by MoE quota (currently 1905, 600)
• Overseas UG, PGT (incl HMT*) not limited by quota
• Overall PhD recruitment is restricted by MoE quota (currently 225)
• Overall student numbers are restricted by number of available beds (and other factors) – currently 7500 (increasing to 8565)
• MoE figures are (strictly speaking) based on registered students not resident students

* Hong Kong, Macao, Taiwan
Our Students

Undergraduates from 29 provinces, Division One in Gaokao and English score 115 above.

In 2018, UNNC on average recruits top 6% students – second highest in Zhejiang.

PGT/PGR students & int’l students who meet requirements submit application to UNNC.
Mainland China Intake Score by discipline

Average Score above Division One line (2015-2017)

Average Score above Division 1 Line per Course for Arts

Average Score above Division 1 Line per Course for Sciences

Availability of 2+2 boosts programme popularity significantly
The Quality Assurance Agency (QAA) published the review of transnational education in China on 2013, which found that in just eight years, UNNC has achieved its goal of providing its students with the ‘Nottingham experience’ in China.

The 2013 review said: “The student experience received at UNNC which is as fully a British education as is possible to provide in China together with the creation of a tri-campus university that offers unique opportunities for student exchange and transnational education. UNNC is an impressive achievement. As an integral part of the University of Nottingham, the academic standards and the quality of the student learning experience at UNNC are equivalent to those of the home university.”
In 2016/17, UNNC received 3 municipal and 5 provincial awards on teaching related programmes and projects, which accounts for 50% of all 17 Teaching and Learning awards UNNC achieved.

In the latest iGraduate report released in 2017 spring, UNNC’s overall student satisfaction rate reached 91.1%, outperforming the global benchmark rate of 89.7% and Asian average of 87.6% among more than 170 institutions participating this survey in the world.
UNUK hosts around 500 2+2 students, mainly in engineering. UNNC students generally complete their studies in UK with higher score than “other students”. This masks differences between STEM and Arts/SS performance...
Average Gaokao Population Ranking by Score for UNNC 2017 Intake

UNNC minimum intake approximates A*A*A based on 2016 A Level data
UNUK average intake AAB/ABB – 39%, minimum threshold BBC – 60%

simple mean 9.15%
Recruitment – Overseas Students

Internationalisation

% of Overseas Students

- Sep-15
- 16-Sep
- 17-Sep
- 1617 Objective
- 2020 Objective

<table>
<thead>
<tr>
<th>Country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>50</td>
</tr>
<tr>
<td>Taiwan SAR</td>
<td>30</td>
</tr>
<tr>
<td>South Korea</td>
<td>23</td>
</tr>
<tr>
<td>Thailand</td>
<td>14</td>
</tr>
<tr>
<td>Nigeria</td>
<td>11</td>
</tr>
<tr>
<td>Russia</td>
<td>10</td>
</tr>
<tr>
<td>India</td>
<td>9</td>
</tr>
<tr>
<td>UK</td>
<td>9</td>
</tr>
<tr>
<td>Tanzania</td>
<td>9</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>8</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>7</td>
</tr>
</tbody>
</table>

Overseas Degree Student Recruitment

![Chart showing Overseas Degree Student Recruitment from 2013 to 2017]
Our graduates

For Class of 2018, 25.6% of students who chose to go on further study went to a QS World top 10 university.

<table>
<thead>
<tr>
<th>University 大学</th>
<th>Enrollment No 入学人数</th>
<th>18/19 QS Rank QS 排名</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford University 斯坦福大学</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>University of Oxford 牛津大学</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>University of Cambridge 剑桥大学</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Imperial College London (伦敦大学)帝国理工学院</td>
<td>90</td>
<td>8</td>
</tr>
<tr>
<td>University of Chicago 芝加哥大学</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>University College London (UCL) 伦敦大学学院</td>
<td>143</td>
<td>10</td>
</tr>
</tbody>
</table>

81.9% of students went to a QS 100 university

82% of our masters graduates are employed by world renowned companies

PhD employment rate is 100%
Further study by UNNC Students ref QS top 100

• The vast majority of UNNC graduates go overseas for further study
• Most of these attend World Top 50 Universities

Last year’s Top 10 destinations

<table>
<thead>
<tr>
<th>University</th>
<th>enrollment number</th>
<th>17/18 QS rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford University</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>University of Cambridge</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>University of Oxford</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>University College London (UCL)</td>
<td>164</td>
<td>7</td>
</tr>
<tr>
<td>Imperial College London</td>
<td>99</td>
<td>8</td>
</tr>
<tr>
<td>Swiss Federal Institute of Technology Zurich</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>
Graduate Pay Survey

Mean 2016 Graduate starting salary (Domestic Chinese employment): RMB 4765/month
UNNC Graduate starting salary RMB 9510/month
9 PDM students have received 10 awards from IDA (International Design Award, U.S.) and European Product Design Award in 2018.

PhD student XIE Linjun receives award from German government.

Our alumnus CHEN Yeting, International communications, interpreted for former president of Peru.

UNNC alumni Belle Chen and Abubakar Sadiq Mohammed Falalu were named in Forbes 30 under-30 lists of China / Africa in 2018 who are recognised as promising young entrepreneurs.
University experience

Students second in SIFE World Cup, beating out the national champions of 38 other countries with a presentation and annual report on their community outreach projects.

Tri-campus games and arts festival

Over 100 student-run clubs and societies

Life cycle fundraising to encourage education equity
Dec 25th 2016
Ningbo’s first Rock Climbing Guidebook 2018!

宁波自然岩壁路书
Rock Climbing in Ningbo

声明 Disclaimer: xx
宁波自然岩壁开发背景 Earlier Developments around Ningbo xx
宁波岩壁开线者介绍 The Pioneers xx
感谢 Acknowledgements xx
宁波岩壁汇总表 Summary of Climbing Areas xx
宁波岩壁分布图 Overview Map xx
宁波岩壁使用建议 Safety Advice xx
岩场名称：西岙岩场 Xi Ao Valley (Fenghua) xx
岩场名称：狮子山岩壁 Lion Cliff xx
岩场名称：石门岗岩壁 Shengjiaang Gang Cliff xx
岩场名称：三十六湾村小岩壁 Xiaoyanbi, Saniuwan Village (East Cliff) xx
岩场名称：三十六湾村大岩壁 Sanshi Liuwan Cun West Cliff (the Big One!) xx
岩场名称：珠山尖岩壁 Zhushan Cliff xx
岩场名称：珠山尖抱石 Zhushan Boulder Field xx
UNNC Research and Knowledge Exchange

• UNNC Faculty are recruited on the basis of research excellence and provided with resources to realise their full potential.
• Graduate School manages research training environment
• Promotions are based on combined research and teaching portfolio
• Foreign faculty are supported by local staff in grant writing for Chinese agencies
• Overall research environment is relatively good although UNNC treated as private University by MoE
Strategic Research Platforms

- AHRC Centre for Digital Copyright and IP Research
- Institute of Aerospace Technology China
- The University of Nottingham Ningbo New Materials Institute (NMI)
- PBOC Ningbo Inclusive Finance Research Centre (IFRC)
- International Academy for Marine Economy and Technology (IAMET)
- Yuyao Electrification Centre
• Research Awards 16/17 RMB 112.5M (up 51%)
• Industry is around 30% of total – joint centres with AVIC and COMAC
• Papers in top 10% journals 15.5% (UNUK is 19.5%)
• 27 patent filings registered in 2017
• Registered PhD students: about 440 (18/19)
• PhD quota raised in 2017 from 75 to 225 p.a.
• Joint PhD centres launched with several CAS Institutes

Scholarly Output

<table>
<thead>
<tr>
<th>Year</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>50</td>
</tr>
<tr>
<td>2012</td>
<td>100</td>
</tr>
<tr>
<td>2013</td>
<td>150</td>
</tr>
<tr>
<td>2014</td>
<td>200</td>
</tr>
<tr>
<td>2015</td>
<td>250</td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td></td>
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</tbody>
</table>
Partnerships with China Business
• Chinese consumer behaviour heavily influenced by ranking tables

• **Shanghai ranking methodology favours sino-foreign Universities due to emphasis on quality rather than volume indicators as well as internationalisation**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaokao score (Ranking among peers)</td>
<td>30%</td>
</tr>
<tr>
<td>% of UG employment</td>
<td>10%</td>
</tr>
<tr>
<td>Annual Income of Education Foundation (audited and reported)</td>
<td>5%</td>
</tr>
<tr>
<td>No. of 5Y publications in Scival</td>
<td>10%</td>
</tr>
<tr>
<td>Field-weighted citation impact</td>
<td>10%</td>
</tr>
<tr>
<td>% of publication among top 1% cited</td>
<td>10%</td>
</tr>
<tr>
<td>No. of top cited scholars</td>
<td>10%</td>
</tr>
<tr>
<td>Income of research funding (horizontal only)</td>
<td>5%</td>
</tr>
<tr>
<td>Income from technology transfer, eg. IP transfer</td>
<td>5%</td>
</tr>
<tr>
<td>% of international student</td>
<td>5%</td>
</tr>
</tbody>
</table>
Publication outputs

Quality of academic papers (2017)

% of publications in high ranking journal

% of publications in top 10% journal

% of citation number among world Top 10%

中国C9大学联盟 UNNC
Chinese Universities are improving performance as they publish increasingly in international journals. UNNC and NYU Shanghai have high research impact largely because of international collaboration.
• World leading research centre in Power electronics and Electrical Machine
• Located in Nottingham UK and Ningbo China
  - In total 125 members and $40M active projects
  - Around 30 team members and over ¥43.11M research funding in Ningbo
  - Ningbo team led by Prof Chris Gerada
• Extensive lab and prototyping facilities
• Arguably the largest group in the field world wide.
  - Power Electronics
  - Electrical Machines
  - Electrical Drives
  - Integration
  - Offsite “Electrification Centre” for commercialization of new drive solutions.
Polymer Composites Research Group

- Chaired by Professor Chris Rudd, Professor of Mechanical Engineering, Pro-Vice-Chancellor of UoN and Provost of UNNC
- 20 team members and over ¥26M research funding in Ningbo
- Awarded as Ningbo 3315 Innovation Team
- Joint laboratory award with AVIC Composites Corporation and several international supply companies
Recruitment of high-level scholars to drive forward high-level disciplines

In 2017, UNNC recruited 10 high-level scholars in the key disciplines respectively from

- Material Science
- Engineering
- Health Economics etc.

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017*</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of FULL Professors</td>
<td>20</td>
<td>26</td>
<td>44</td>
</tr>
</tbody>
</table>

*Data till 30th Nov 2017

Dr Li Dak Sum
In December 2016, UNNC launched Li Dak Sum Chair Professor Scheme to recruit 20 world-leading chair professors in 10 key research fields.

By end of May 2018, **25** Chair Professors have been recruited.
Nottingham’s role in Belt and Road

• Talent training for China outbound businesses
  • 2000+ graduates from UNNC each year
  • Around 1000 senior managers trained for China outbound companies – AVIC, CRRC, CRG etc
• Use of international resources in UNNC to connect with Belt and Road countries
• International innovation!
Dr. Li Dak Sum Incubator

- Opened Sept. 2017
- 25 Student and Graduate Start-ups
- Technology Spin-out Centre
- Executive Leadership Centre
- International tech transfer
- Twinning arrangements with Biocity Nottingham and University of Nottingham Innovation Park
- UK-China-India Innovation Corridor
Case Study - China-Britain FC

- Established in 2016 by 2 UNNC Alumni
- Brokerage of International Soccer Club partnerships in mainland China
- Soccer Training camp provider in China
- Coordinator for Soccer Academy Tours in UK
- Joint tenancies in Nottingham (UK) and Nottingham (Ningbo) Incubators
- Winners *Ingenuity 2018*
Benefits to Stakeholders

- **UoNottingham**
  - Revenue
  - Reputation
  - Talent
  - Research and KE expansion

- **Nottingham City**
  - Inward investment
  - Healthcare and Education partnerships
  - Tourism

- **Ningbo City**
  - Internationalisation
  - Talent introduction
  - Urban Regeneration
  - Educational reform

- **Families**
  - Springboard to overseas study at top GS
  - Graduate Earnings
  - High wealth networks
  - Inspiring peer group
Opportunities

• Enhanced access to domestic UG market in the west
• Research collaboration opportunities
  • Other Universities
  • Government
  • Local Industry
• Access to talent pool

Challenges

• Maintaining stakeholder engagement
• Maintaining quality on limited resources
• Management stretch and institutional culture
• International talent and turnover
• International recruitment
• Governance arrangements
• Brand protection
• Student welfare
• Income diversification
• Restriction of academic materials
Inter-campus activities

- Important for professional development, student experience and institution building
- Secondments – around 15 senior faculty and administrators in China are seconded from UNUK.
- Split appointments – around 12 joint chairs
- Travelling fellowships for admin staff
- 2+2 UG transfers – around 250 p.a.
- Exchange out places – around 400 p.a.
- Inter-campus PhD projects
- Tri-campus activities
  - Tri-campus games
  - Tri-campus arts festival
  - Tri-campus teaching and learning conference