EU – CHINA
TUNING JOINT STUDY

Co-presented by
Prof. Robert Wagenaar and Prof. Xianjin Dou

Initiated by
EU-China High Level People-to-People Dialogue (HPPD)
Outline

1. Main objectives of the study
2. Implementation of the study
3. Tuning methodology
4. Outcomes of the study
5. Follow-up
1. Objectives

Following the first conference of EU-China High Level People-to People Dialogue on 18 April 2012 in Brussels, both sides decided to launch an EU-China Tuning Joint Study. **The General objectives:**

- Strengthen the *compatibility* of EU and Chinese Higher Education and draw on the experience and detailed understanding of the Tuning approach developed in the EU
- Enhance *outcome-based* education
- Establish commonly acknowledged *quality criteria*
- Develop tools for *mutual recognition*
- Overcome obstacles to *mobility* of students, graduates and academic staff between China and the EU
- To enable closer ties between *higher education policy* makers in China and the European Union
Concrete tasks:

A. Investigate the alignment of academic standards and reference points in higher education for China and the European Union based on Pilot studies of three subject areas: Civil Engineering, Education Studies, Business Studies.

B. Applying the successful Tuning methodology in enhancing the quality of Chinese higher education.

C. Chart the best way to implement a potential follow-up project, including the scope of the undertaking and issues at stake.
2. Implementation of study

The China-EU Tuning Joint Study Office was established by MOE to coordinate the Project. Prof. Dou and his team coordinated the Whole Study Process in China. Three subject areas, Business Administration, Civil Engineering and Comparative Education, were selected for the pilot study.

The leading experts of the three groups:
- Prof. Xi Youmin, Xi’an Jiaotong University, Xi’an
- Prof. Huang Hongwei, Tongji University, Shanghai
- Prof. Liu Baocun, Beijing Normal University, Beijing

In each subject area, 5 to 10 universities participated in the pilot. In total 20 renown universities and 30 Chinese professors participated in the study.
European experts:

- Co-chair of the project: Robert Wagenaar (University of Groningen) and his team of the Tuning Academy (Julia Gonzalez, Pablo Beneitone, Ingrid van der Meer)
- Business Administration: Dan Frost (Umea University), Margret Schermutzki (University of Aachen)
- Civil Engineering: Giuliano Augusti (University of Rome), Alfredo Soeiro (University of Porto)
- Education: Arlene Gilpin (Tuning expert, formerly at University of Bristol), Soren Ehlers (University of Copenhagen)

Each subject group hold three meetings during the last two years to move forward the project.
3. Tuning Methodology

- Develop one language understood worldwide by all stakeholders: competences and learning outcomes
- **Stress the importance of general academic competences and skills for society**
- Involve stakeholders in the process of curriculum design and enhancement
- Develop shared (inter)national reference points at disciplinary / subject area level
- Give academics a key role in the process of reforming Higher Education structures and its degree programs and qualifications
- Focus on diversity by promoting flexibility
- Facilitate (inter)national mobility and recognition of studies
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Tuning is based on the assumption that higher education in the 21st century should be student driven and learning outcomes based.

Nowadays students care for “competencies” they obtain to play a successful role in a changing society.
Developing *References Points for the Design and Delivery of Degree Programmes in .....*

- Standard setting
- Non-prescriptive

**Process:**
- Establish group of 12-15 experts
- Describe Academic Field
- Define list of Generic Competences
- Define list of Subject Specific Competences
- Map typical degrees
- Map potential employability field
- Identify appropriate TLA approaches
- Identify appropriate quality assurance mechanisms
Application of Tuning methodology:

- Consultation of stakeholders, involving employers, graduates, senior students, academics:
  - Data analyzes and discussion as input for the meta-profiles
  - Identification of communalities and differences between European and Chinese higher education to promote transparency and to develop better understanding between Europe and China
Questionnaire

- **Generic competencies (33):** resulting from consultation of experts from both sides, based on the list provided by European experts, taken into consideration of high education in China and suggestions of experts in the three subject groups.

- **Subject specific competencies:** decided respectively by the universities of each subject group in consultation with the European experts.

  (For Business: 26; Engineering: 27; Education: 22)
Tuning Stakeholders Consultation Questionnaire for Generic / General and Subject –Specific Competences

Variables:

1. Degree of importance:
   1 to 4: None; Weak; Considerable; Strong

2. Level achievement
   1 to 4: None; Weak; Considerable; Strong

3. Ranking of importance
### Tuning Methodology (6)

**Analysis of Data:**

| Generic Competences | General analysis (common for all 3 Subject Areas) | In relation to the 4 groups  
In relation to the 3 variables  
In relation to other world regions |
|----------------------|--------------------------------------------------|
|                      | Analyzed from the perspective of one discipline   | In relation to the 4 groups  
In relation to the 3 variables  
In relation to general results |

| Subject specific competences | Analyzed from the perspective of the discipline | In relation to the 4 groups  
In relation to the 3 variables |
|-----------------------------|-------------------------------------------------|-------------------------------|
Tuning Methodology (7)

Data collected for the three disciplines:

**GENERIC COMPETENCES**

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Education</th>
<th>Civil Engineering</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics</td>
<td>107</td>
<td>66</td>
<td>134</td>
<td>307</td>
</tr>
<tr>
<td>Employers</td>
<td>143</td>
<td>230</td>
<td>109</td>
<td>482</td>
</tr>
<tr>
<td>Students</td>
<td>152</td>
<td>138</td>
<td>184</td>
<td>474</td>
</tr>
<tr>
<td>Graduates</td>
<td>149</td>
<td>213</td>
<td>123</td>
<td>485</td>
</tr>
<tr>
<td>Total</td>
<td>551</td>
<td>647</td>
<td>550</td>
<td>1748</td>
</tr>
</tbody>
</table>

**SPECIFIC COMPETENCES**

<table>
<thead>
<tr>
<th></th>
<th>Business</th>
<th>Education</th>
<th>Civil Engineering</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academics</td>
<td>107</td>
<td>61</td>
<td>108</td>
<td>276</td>
</tr>
<tr>
<td>Employers</td>
<td>141</td>
<td>196</td>
<td>98</td>
<td>435</td>
</tr>
<tr>
<td>Students</td>
<td>150</td>
<td>122</td>
<td>166</td>
<td>438</td>
</tr>
<tr>
<td>Graduates</td>
<td>144</td>
<td>188</td>
<td>119</td>
<td>451</td>
</tr>
<tr>
<td>Total</td>
<td>542</td>
<td>567</td>
<td>491</td>
<td>1600</td>
</tr>
</tbody>
</table>
4. Outcomes of Study

Generic Competences:
- Business Administration
- Civil Engineering
- (Comparative) Education

Main observations and outcomes
<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>Importance</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capacity for analysis and synthesis</td>
<td>3.61</td>
<td>2.85</td>
</tr>
<tr>
<td>15</td>
<td>Problem solving</td>
<td>3.60</td>
<td>2.73</td>
</tr>
<tr>
<td>10</td>
<td>Capacity to learn Actively</td>
<td>3.55</td>
<td>2.88</td>
</tr>
<tr>
<td>18</td>
<td>Interpersonal skills</td>
<td>3.49</td>
<td>2.73</td>
</tr>
<tr>
<td>17</td>
<td>Teamwork</td>
<td>3.48</td>
<td>2.76</td>
</tr>
<tr>
<td>33</td>
<td>Ability of self-management</td>
<td>3.45</td>
<td>2.73</td>
</tr>
<tr>
<td>2</td>
<td>Capacity for applying knowledge in practice</td>
<td>3.44</td>
<td>2.58</td>
</tr>
<tr>
<td>25</td>
<td>Ability to work autonomously</td>
<td>3.34</td>
<td>2.64</td>
</tr>
<tr>
<td>14</td>
<td>Capacity for generating new ideas</td>
<td>3.34</td>
<td>2.57</td>
</tr>
<tr>
<td>28</td>
<td>Ethical commitment and professional attitude</td>
<td>3.34</td>
<td>2.78</td>
</tr>
<tr>
<td>6</td>
<td>Oral and written communication in your native language</td>
<td>3.34</td>
<td>2.81</td>
</tr>
<tr>
<td>3</td>
<td>Planning and time management</td>
<td>3.34</td>
<td>2.55</td>
</tr>
<tr>
<td>30</td>
<td>Concern for quality</td>
<td>3.31</td>
<td>2.67</td>
</tr>
<tr>
<td>13</td>
<td>Capacity to adapt to new situations</td>
<td>3.31</td>
<td>2.61</td>
</tr>
<tr>
<td>29</td>
<td>Social responsibility and civic awareness</td>
<td>3.26</td>
<td>2.75</td>
</tr>
<tr>
<td>27</td>
<td>Initiative and entrepreneurial spirit</td>
<td>3.24</td>
<td>2.44</td>
</tr>
<tr>
<td>31</td>
<td>Will to succeed</td>
<td>3.20</td>
<td>2.76</td>
</tr>
<tr>
<td>16</td>
<td>Decision-making</td>
<td>3.17</td>
<td>2.47</td>
</tr>
<tr>
<td>26</td>
<td>Project design and management</td>
<td>3.16</td>
<td>2.52</td>
</tr>
<tr>
<td>5</td>
<td>Grounding in basic knowledge of the profession in practice</td>
<td>3.14</td>
<td>2.70</td>
</tr>
<tr>
<td>24</td>
<td>Commitment to health and safety</td>
<td>3.12</td>
<td>2.51</td>
</tr>
<tr>
<td>4</td>
<td>Basic general knowledge in the field of study</td>
<td>3.09</td>
<td>3.00</td>
</tr>
<tr>
<td>32</td>
<td>Environment awareness and commitment to sustainable development</td>
<td>3.06</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Leadership</td>
<td>3.04</td>
<td>2.39</td>
</tr>
<tr>
<td>9</td>
<td>Research skills</td>
<td>3.03</td>
<td>2.67</td>
</tr>
<tr>
<td>11</td>
<td>Information management skills</td>
<td>3.00</td>
<td>2.57</td>
</tr>
<tr>
<td>20</td>
<td>Ability to work in an interdisciplinary team</td>
<td>2.94</td>
<td>2.40</td>
</tr>
<tr>
<td>12</td>
<td>Critical and self-critical abilities</td>
<td>2.92</td>
<td>2.37</td>
</tr>
<tr>
<td>22</td>
<td>Appreciation and understanding of culture diversity</td>
<td>2.87</td>
<td>2.59</td>
</tr>
<tr>
<td>23</td>
<td>Ability to work in an international context</td>
<td>2.82</td>
<td>2.33</td>
</tr>
<tr>
<td>21</td>
<td>Ability to communicate with non-experts in the field</td>
<td>2.82</td>
<td>2.37</td>
</tr>
<tr>
<td>7</td>
<td>Capacity to communicate with a second language</td>
<td>2.77</td>
<td>2.43</td>
</tr>
<tr>
<td>8</td>
<td>Computing skills</td>
<td>2.62</td>
<td>2.68</td>
</tr>
</tbody>
</table>
Outcomes of Study (3)
Generic Competences
Outcomes of Study (4)
Generic Competences

Importance

Graph showing the importance of various competences over time, with data points for Academics, Employers, Students, and Graduates.
Academics: Top 5 competences

**EUROPE**

1. Ab. for abstract thinking, analysis and synthesis
2. Ab. to apply knowledge in practical situations
3. Knowledge and und. of the subject area and und. of the profession
4. Ab. to identify, pose and resolve problems
5. Cap. to learn and stay up-to-date with learning

**CHINA**

1. Capacity for analysis and synthesis
2. Capacity for applying knowledge in practice
3. Capacity to learn actively
4. Problem solving
5. Ability of self management
Outcomes of Study (6)
Europe and China compared

**EUROPE**

1. Abil. to appl. knowledge in practice
2. Ability for abstract thinking, analysis and synthesis
3. Ability to identify, pose and resolve problems
4. Knowledge and und. of the subject area and und. of the prof.
5. Ability to work in a team

**CHINA**

1. Capacity for analysis and synthesis
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3. Problem solving
4. Capacity to learn actively
5. Interpersonal skills

Employers: Top 5 competences
Outcomes of Study (7)
Europe and China compared

**Students: Top 5 competences**

<table>
<thead>
<tr>
<th>EUROPE</th>
<th>CHINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ab. to apply knowledge in practical situations</td>
<td>1. Capacity for analysis and synthesis</td>
</tr>
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<td>2. Ab. for abstract thinking, analysis and synthesis</td>
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<td>3. Capacity to learn actively</td>
</tr>
<tr>
<td>4. Knowledge and und. of the subject area and und. of the profession</td>
<td>4. Problem solving</td>
</tr>
<tr>
<td>5. Ability to work in a team</td>
<td>5. Interpersonal skills</td>
</tr>
</tbody>
</table>
Outcomes of Study (8)  
Europe and China compared

**EUROPE**

**Graduates: Top 5 competences**

1. Ab. to apply knowledge in practical situations
2. Ab. for abstract thinking, analysis and synthesis
3. Ab. to identify, pose and resolve problems
4. Knowledge and und. of the sub. area and und. of the prof.
5. Cap. to learn and stay up-to-date with learning

**CHINA**

1. Capacity for analysis and synthesis
2. Capacity to learn actively
3. Capacity for applying knowledge in practice
4. Problem solving
5. Interpersonal skills
Outcomes of Study (10)
Europe and China compared

Common 3 competences equal:

- Capacity for analysis and synthesis
- Capacity for applying knowledge in practice
- Problem solving
Outcomes of Study (11)
Europe and China compared

Common 2 competences equal:
- Capacity for analysis and synthesis
- Capacity for applying knowledge in practice
Outcomes of Study (12)

A. Alignment of academic standards and reference points

- Survey has offered *more insight*: Comparable expectations among and between stakeholder groups in China and Europe (and other world regions)
- Relevance of *generic competences highly valued* in both China and Europe
- Similar results survey China with other world regions: same top 3 key generic competences identified for Europe and China
- Wider gap between *Importance* and *Achievement of generic competences* in China compared to Europe
Alignment of academic standards and reference points

- Survey shows *substantial differences* between three subject areas regarding *subject specific competences* of Business Administration, Civil Engineering and Comparative Education.

- Confirms idea that *more sectors and disciplines should be covered* as part of a Tuning Process to obtain a better understanding of weaknesses and strengths.
Outcomes of Study (14)

No consistency in outcomes between subject areas regarding subject specific competences:

- Substantial differences between importance and achievement: business and education
- No substantial differences between importance and achievement: civil engineering
- High level of correlation between stakeholder groups: business
- Differences regarding importance between 4 stakeholder groups: civil engineering and education
- (Some) Subject specific competences strongly linked to generic competences: business and education
- Many competences rated low in terms of importance, but rated high level of achievement: civil engineering
Outcomes of Study (15)

- The *Tuning* ‘student-oriented and competences based’ approach *is in compliance* with the Chinese reform policy for Higher Education.

- The theories and methods of *Tuning* have obvious *value as reference* for the planned reform process of the talent – training model of Higher Education in China.

- The lack of a credit mechanism to compare and recognize periods of studies between China and Europe (ECTS) proves to be a substantial obstacle for the extension and deepening of cooperation. This observation is supported by the experiences of the Erasmus Mundus Chinese Lots.
Outcomes of Study (16)

B. Applying the successful Tuning methodology

- The pilot study shows that China is struggling with comparable problems to modernize its Higher Education sector as other world regions (including Europe).

- The approach and language used is clearly recognized and understood in the Chinese context.

- It has proven to be possible and feasible to develop high level and relevant Meta-profiles / conceptual frameworks for different types of subject areas / disciplines: Business Studies, Civil Engineering, Education Studies.
Outcomes of Study

Overall Conclusion

The common challenges of higher education in China and Europe are to deal with the continuous changing supply and demand of the labor market.

The China-EU Joint Study is valuable in promoting the three pilot subjects in terms of transparency and compatibility. It provides effective instruments for mutual recognition between China and Europe. The Tuning methodology and the Chinese ongoing exploration of cooperative education are moving in the same direction. Tuning is a good reference to enhance quality of higher education in China.
5. Follow-up

On the basis of the outcomes of this three subject Pilot Study it is recommended to set-up an Extended Study:

1. *Disseminate and discuss the outcomes* of the Pilot Study among HE institutions in China which offer degrees in the three disciplines covered: Business, Civil Engineering and Education

2. *Widen the group of disciplines to cover other academic domains* of Higher Education (Natural Sciences, Health Care, and Arts and Humanities)
3. **Align the EU and Chinese credit systems** by focusing on the outcomes of the learning process and the workload of students, which might imply to move forward the reform process of the present credit system(s) in China.

4. **Align the quality assurance mechanisms** in China and the EU to facilitate recognition and mobility.

5. **Disseminate outcomes of Pilot Study in Europe** by publication of book and articles in English and on Tuning Website and offer presentations at designated conferences.
3. **Align the EU and Chinese credit systems** by focusing on the outcomes of the learning process and the workload of students, which might imply to move forward the reform process of the present credit system in China.

4. **Align the quality assurance mechanisms** in China and the EU to facilitate recognition and mobility.

5. **Disseminate outcomes of Pilot Study in Europe** by publication of books and articles in English and on Tuning Website and offers presentations at designated conferences. This should lead to a better understanding and appreciation of the Chinese Higher Education system and its degree programmes.
Thank you for your attention!

非常感謝

http://tuningacademy.org