The European Campus
Heritage and Challenges

Alexandra den Heijer
George Tzovlas

Introduction

Background
Why this research project?

Goal:
To support campus decisions of European Universities

Alexandra den Heijer
Managing the university campus
2013
PhD Dissertation

The European Campus
2014
Step 1, PhD Research
George Tzovlas

The European Campus
Contents

a.1 Proposals
a.2 Data Collection
b.1 Performance Indicators
b.2 Vision for EU Campus

The European Campus
Introduction

What?

Public HEIs
Tuition Fees < Public Funding
Exemption: UK, Ireland

Universities
3rd Cycle, Doctoral Education

European Union
28 member states in 2014

more info: http://managingtheuniversitycampus.nl
The European Campus
Heritage and Challenges

Introduction

How?

- Focus on institutions
- Focus on real estate

- Strategic goals to support: quality ambitions
- Financial costs, benefits, value

- Users, satisfaction, function, mobility
- Functional
- m², condition, location, quality
- Physical

Propositions

The Campus for Europe 2020

The European Campus is a key asset in “the (global) Battle for Brains”

- For global competition in attracting talent
- For productivity – workplace for future student / faculty / staff
- For profitability – financial sustainability, resource efficiency
- For sustainable development – footprint – m² / user

Propositions

The Campus as an enabler

1. Universities as growth engines – place matters.

2. European knowledge economy accommodated in cultural heritage buildings.

3. European unicities considered attractive places to live, work, be.

more info: http://managingtheuniversitycampus.nl
Propositions: The Campus as a disabled


2. Low utilisation rates, high vacancy rates in offices, laboratories, classrooms.

3. Campus costs about 5% to 15% of university budget, affecting their financial sustainability.

Data Collection: Method

Information from 869 universities

- Students
- Staff
- Budget
- Campus size
The European Campus: Heritage and Challenges

Performance Indicators: Students

- More than 20 mln students in EU higher education
- More than 11.5 mln students in EU universities
- 1 mln students from outside EU

Largest sector:
- UK, with 2 mln students

Smallest sector:
- Malta, with 11k students

On average 17 students per 1 academic staff

Performance Indicators: Finances

- Total estimated expenses: €80 bn to €130 bn
- Average expenses per student: €8,200
- Max average expenses per student: €24,500, Denmark
- Min average expenses per student: €545, Greece

Southern Europe under-funded compared to other regions

Performance Indicators: Campus Size

- Data availability %
- GFA m² per student

more info: http://managingtheuniversitycampus.nl
Performance Indicators: Campus Size

Total estimated GFA*: 136 m²/m²
Average GFA per student: 10 m²
Max GFA per student: 21 m²/student, Netherlands
Min GFA per student: 2 m²/student, Slovakia
More spacious facilities: Northern Europe and Western Europe

*GFA = gross floor area

GFA/m² per student

4 8 12 16 20 +

Performance Indicators: The functions of the campus

ACADEMIC
classrooms, library, offices, laboratories, lecture halls, ...

RELATED BUSINESS
start-ups, incubators, industry, ...

RESIDENTIAL
student housing, hotels, ...

RETAIL & LEISURE
sports, restaurants, cafes, ...

INFRASTRUCTURE
parking, public transport, public space, ...

Performance Indicators: The age of the campus

New <10 years
Young 11-25 years
Established 26-50 years
Mature 51-100 years
Historic >100 years

Heritage
Challenges

4% 16% 19% 24% 39%

Varying stakeholders for:
Use
Ownership
Management

80%
60%
40%
20%
10% 5%

4% 16% 19% 24% 39%

Academics
Related Business
Infra structure
Residential
Retail & Leisure

more info: http://managingtheuniversitycampus.nl

16-10-14
more info: http://managingtheuniversitycampus.nl
Performance Indicators The condition of the campus

France
- One third of total GFA (m²) requires reinvestment higher than 40% of the replacement cost

Refurbishment cost as a % of Replacement cost for French universities’ GFA

<table>
<thead>
<tr>
<th>Percentage</th>
<th>0% to 10%</th>
<th>10% to 20%</th>
<th>20% to 30%</th>
<th>30% to 40%</th>
<th>40% to 50%</th>
<th>50% to 60%</th>
<th>60% to 70%</th>
<th>70% to 80%</th>
<th>80% to 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>33%</td>
<td>32%</td>
<td>21%</td>
<td>10%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Netherlands & United Kingdom
- Around half of m² GFA from 60s / 70s
- For Mature and Historic universities, 10% to 20% of GFA could be historic buildings.

British universities academic GFA built by era

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic GFA</td>
<td>24%</td>
<td>42%</td>
<td>5%</td>
<td>14%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Romania
- For Established and Mature universities, two thirds of GFA could be old, if not obsolete.

Banat’s University of Agricultural Sciences, Timisoara (established 1945)

<table>
<thead>
<tr>
<th>Age of facilities</th>
<th>0 to 10</th>
<th>10 to 20</th>
<th>20 to 30</th>
<th>30 to 40</th>
<th>40 to 50</th>
<th>50 to 100</th>
<th>more than 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic GFA</td>
<td>58%</td>
<td>16%</td>
<td>12%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Residential GFA</td>
<td>42%</td>
<td>24%</td>
<td>19%</td>
<td>2%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Performance Indicators Sustainability of the campus

Energy efficiency of British university real estate, in DEC labels

- Academic GFA
- Residential GFA

more info: http://managingtheuniversitycampus.nl
Performance Indicators
Sustainability of the campus

- 7.3 bn kWh
- 24 mln m²
- 2.4 tonnes CO₂
- 455 tonnes waste
- 24 mln m³

Sustainability

Performance Indicators

Vision
The European Campus
Heritage and Challenges

Vision
The campus as a disabler for EU 2020

Vision
The campus as an enabler for EU 2020

Vision
Future campus models

more info: http://managingtheuniversitycampus.nl
### Vision

#### Strategic choices for campus

<table>
<thead>
<tr>
<th>Accommodate “exclusive” and “closed”</th>
<th>Accommodate “shared” and “open”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low % of resources spent on the campus</td>
<td>High % of resources spent on the campus</td>
</tr>
<tr>
<td>Only public funding</td>
<td>Allow private funding</td>
</tr>
<tr>
<td>Low space use per student or employee</td>
<td>High space use per student or employee</td>
</tr>
<tr>
<td>Focus on individual needs</td>
<td>Focus on collective needs</td>
</tr>
<tr>
<td>Accept % buildings in bad condition</td>
<td>All buildings at least reasonable condition</td>
</tr>
<tr>
<td>Smaller ecological footprint</td>
<td>Larger ecological footprint</td>
</tr>
</tbody>
</table>

### Vision

#### Next Steps

- Research (step 2)
  - Assess and develop more resource-efficient campus strategies and tools
- On the European level
  - Lobbying for "Modernising Universities" on the European agenda
  - Campus seminar / workshop with EUA in 2015
  - Explore CESAE Task Force “Campus strategies”

### Vision

#### Additional Information

Copy of the book “The European Campus” available for every participant at the registration desk with compliments of CESAE and TU Delft.

More about the book and research “Managing the university campus”:
http://managingtheuniversitycampus.nl

(see DOWNLOADS for hand-out)

---

more info: http://managingtheuniversitycampus.nl