Managing the European campus
attracting and accommodating
Europe’s knowledge capital

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Delft University of Technology (TU Delft), Netherlands

Managing the university campus →
Managing the European campus

• book since 2011 academic bestseller
  (> 1700 copies + eBooks)
• putting campus management on the education, research &
  innovation agenda
• gathering data in European network
  → supporting campus decisions of EU member states

PHYSICAL definition of “campus”

the “campus” is defined as the (collection of) buildings and
land, used for university or university-related functions

FUNCTIONAL definition of “campus”

• ACADEMIC classrooms, library, offices, laboratories, lecture halls, ...
• RESIDENTIAL student housing, hotels, ...
• RELATED BUSINESS start-ups, incubators, industry, ...
• RETAIL & LEISURE sports, restaurants, cafes, ...
• INFRASTRUCTURE

CONTENT

1. Vision on managing the university campus (THEORY)
2. Opportunities and threats for the European campus (PRACTICE)
3. Future models for the European campus (STRATEGIES)

http://
www.managingtheuniversitycampus.nl
The European campus is a key asset in “the (global) Battle for Brains”

*good facilities can attract talent
bad facilities can chase them away...*

UK research (HEDQF* 2012) showed that 1/3 of all students admit to have rejected a university based on the (poor quality of) the physical environment.

That does not necessarily mean “buildings in bad condition”, but could also refer to an isolated campus or lack of social space.

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Why study abroad?

**Reasons (not) to go**

<table>
<thead>
<tr>
<th>reasons to go</th>
<th>reasons not to go</th>
</tr>
</thead>
<tbody>
<tr>
<td>academic reputation</td>
<td>25%</td>
</tr>
<tr>
<td>country / city / culture</td>
<td>24%</td>
</tr>
<tr>
<td>employability</td>
<td>18%</td>
</tr>
<tr>
<td>personal/intercultural relation</td>
<td></td>
</tr>
<tr>
<td>university services</td>
<td>17%</td>
</tr>
<tr>
<td>quality of life, friends, love</td>
<td>11%</td>
</tr>
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</table>

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**Top of the pyramid – no effect**

- top 101: students will enroll regardless the quality of the campus
- top >100: quality of place matters

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**proposition (PhD defence)**

Each university goal can be frustrated by the physical campus

*(that includes KNOWLEDGE TRANSFER / INNOVATION goals)*

- Elke universiteit kan door de fysieke campus worden gefrustreerd.
- Kada metu universitāte var kļūt veselības problēma par zemāko kvalitāti.
Universities as urban growth engines

Nowadays, research is considered an essential activity for innovation in society, which increasingly involves the interaction of governments, industries and universities, whose strategic goals appear to be aligned and similar in a global context.

Technology campuses

- When and where did technology campuses emerge?
- In which historical context (technological developments)?

Universities as urban growth engines

- Where are technology campuses located?
- Are they located in places with similar conditions?

Technology campuses & cities

- Spatial relationships between technology campuses and their hosting cities.
Assessing 60 university projects: trends, facts & figures

Assessing 14 university campuses: trends, facts & figures

Assessing 28 EU member states: 14 so far

From literature: what generates innovation?

1. Interaction – between academic ‘acquaintances’ from different scientific backgrounds – is better than ‘academic friends’ or ‘academic family’ (analogy: genetics)
2. Serendipity as innovation motor – new ideas by accident, unplanned interaction
3. The physical presence of people relevant to universities – ‘meeting of minds’
4. “No clicks without bricks” – no world-class university can be entirely virtual
5. Informal meetings: build trust (biology matters) – (espresso) bars, public space, social media contribute to that
6. Importance of place attachment – 2nd home for international community – ‘feeling at home’ will make knowledge workers stay (1st house, 1st child)

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for global competition in attracting talent
for productivity – quantity and quality of output
for profitability – most effective way to spend budget
for sustainable development – CO₂ emission + m² / user

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European campus as an enabler for Europe 2020

1. Universities as economic growth engines: “place matters”
2. Europe’s knowledge economy accommodated in cultural heritage buildings
3. European “univer-cities” are considered attractive places to live, work, be...

Campus of the future:
- more quality, less quantity
- new life for old buildings
- increase benefits / m² to cover high maintenance cost / m²
- users accept more defects of meaningful, historic buildings

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European campus as an enabler for Europe 2020

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

European campus as a disabler for Europe 2020

Technical condition campus

**Netherlands**

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<th>% of m²</th>
<th>Cost as % of replacement cost</th>
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<tbody>
<tr>
<td>A</td>
<td>33%</td>
<td>2%</td>
</tr>
<tr>
<td>B</td>
<td>32%</td>
<td>4%</td>
</tr>
<tr>
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Grade A = excellent
Grade B = good
Grade C = reasonable
Grade D = moderate
Grade E = bad

11% * 4.4 mln = 0.484 mln

**France**

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“Cellular office symbolic for cellular research”

Campus of the future:
- changing the academic workplace
- sharing laboratories and other expensive facilities

Project costs: € 500 - € 4000 / m² gross floor area (price level 2011)

MASLOV – hierarchy of needs cumulative quality levels

Maslov's hierarchy of needs:
- healthy
- safe
- social
- attractive
- inspiring

Healthy & safe workplace
Place for social interaction
Landmark

“on a busy day: less than 20% of the desks is occupied”

Various utilization studies
The European campus is a key asset in “the (global) Battle for Brains”

**European campus as a disabler for Europe 2020**

1. > 50% from 1960s/70s
2. bad functional / technical state: reinvestments required
3. low utilization rates: high vacancy rates of offices, laboratories, classrooms
4. campus 10-15% of total costs
5. negatively affects “financial sustainability” of universities

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**Not enough resources: sharing is the only option…**

“To share or not to be…”

Students and academic staff sharing workspace → reducing the footprint, improving interaction

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The campus of the future is a city

The city of the future is a campus (univer-city)

1. use heritage for branding – students* become tourists
2. reduce the footprint – densely populated areas contribute to innovation
3. less private, more public use of space – showcase, open, 24/7 access
4. ‘urban meeting rooms’ – to merge urban and university communities
5. regional alignment – planning in a public-private network

* and other knowledge workers

scenario “Neglect”

- productivity loss
- lower profitability
- reputation

scenario “Invest”

- higher capital costs
- at cost of resources education & research
- impact campus on financial sustainability
- monitor smart, sustainable, inclusive investments (Europe 2020) with “university campus stress test”
## Assessing campus strategies

**→ spend university resources effectively**

### university campus stress test
- assessing technical state
- footprint / user
- shared use versus territory
- benefits / m²
- costs / m²
- costs campus / total costs
- branding the university city
- use of academic heritage

### competitive advantage

### profitability

### sustainability

### quality & quantity

### output

### financial resources (€)

### resources (m² - CO₂)

## Strategic choices for campus of future

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## Strategic choices for campus of future

- **accommodate**
  - "exclusive" and "closed" accommodated
  - "shared" and "open" accommodated

- **low % of resources spent on the campus**
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- **small(er) ecological footprint**
  - small(er) ecological footprint
  - large(r) ecological footprint

### What’s next?

1. **TU Delft and EUA (European University Association) will organise a seminar**
   "The European campus as an asset in the global battle for brains" (May/June 2014).

2. **Next publication**: "The European campus – heritage and challenges” (part 1 – country profiles), to be launched at the 2014 seminar.

3. **Exploring a campus stress test** (with DG Research & Innovation)

4. **Researching the European campus**
   - multidisciplinary research – from regional economy and urban planning, to spaces that encourage innovation.
   - supporting campus decisions of EU member states – to achieve goals in education, research and knowledge transfer.

## Share knowledge in European network of universities / campus organisations

- **EUA (all European universities)**
- **OECD / Centre for Educational Learning Environments (CELE)**

**national / regional networks**:  
- **HOI (NL), AUDE (UK), NUAS (Nordic countries), H5 (Germany)**,  
- **Academiska Hus (Sweden), BIG (Austria), Aaltonet, Kykyo (Finland),...**  

*The selection is based on existing contacts for the research project “Managing the university campus”*

## GOAL

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Follow me on Twitter:  
@alexandra_dh

Hand-out presentation + more info about all research projects:  
http://managingtheuniversitycampus.nl

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