Campus of the future
Opportunities of a crisis

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1. Vision on managing the university campus (THEORY)
2. Trends that shape the campus of the future (REFERENCES)
3. Opportunities of a crisis – case BK city (PRACTICE)
4. Design guidelines (STRATEGY)

CONTENT / Propositions

1. Each university goal can be frustrated by the physical campus.
   As instalações do campus podem afectar os objectivos da universidade.
2. The innovative and flexible knowledge economy can bring new life to obsolete industrial heritage buildings. A economia de conhecimento que é inovadora e flexível pode trazer uma nova vida aos edifícios obsoletos de herança industrial.
3. It takes a crisis – for example a fire – to change the academic workplace. É necessário uma crise – por exemplo um fogo – para alterar as instalações académicas.
4. The campus of the future is a city. O campus do futuro é uma cidade.

CONTENT

PHYSICAL definition of “campus”

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

http://managingtheuniversitycampus.nl//downloads

CONTENT

1. Vision on managing the university campus (THEORY)
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:

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

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

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>1. academic reputation</td>
<td>1. academic reputation</td>
</tr>
<tr>
<td>- professors, programme, teaching method, rankings</td>
<td>- English / language skills of staff, workload</td>
</tr>
<tr>
<td>2. country / city / culture</td>
<td>2. city / culture</td>
</tr>
<tr>
<td>3. career development</td>
<td>3. social life</td>
</tr>
<tr>
<td>- employability, learning the language, personal / intercultural relations</td>
<td>- lack of organised events</td>
</tr>
<tr>
<td>4. university services</td>
<td>4. university services</td>
</tr>
<tr>
<td>5. social life</td>
<td>5. quality of life, friends, love</td>
</tr>
</tbody>
</table>

source: European study choice platform “StudyPortals” (2012)

History of the campus and the city

1. - until 1930
   - small, elite universities
   - campus = city
2. - between 1950s and 1990s
   - explosive growth, unsafe laboratories
   - move to the edge of town
3. - around 2000
   - city has surrounded the campus
   - what’s next?
4. - 21st century
   - (a) merge campus and city?
   - (b) campus as new city?

source: Managing the university campus (Den Heijer, 2011)
Physical proximity allows social density and therefore, it increases the chances of intellectual and/or social interaction between people. Indeed, these chances depend not only on the type of activities allocated in a place and the people they involve, but also depends on the way both people and activities are accommodated in the built environment.

Technology campuses are planned, clustered and (quasi-)isolated built environments. In fact, there is no evidence that supports these characteristics of the built environment enhance research activity. However, their existence supports there are reasons to believe they do.

Despite globalization trends, physical proximity is believed to facilitate the flows of tacit knowledge and it is actively encouraged in campuses' strategies.
Technical condition campus potential risk

Netherlands

France

CONTENT

1. Vision on managing the university campus (THEORY)
2. Trends that shape the campus of the future (REFERENCES)

BRIEF for the campus of the future

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

Academic: education & research

Space types on campus, example NL

http://www.managingtheuniversitycampus.nl
"Cellular office symbolic for cellular research"

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

source: various utilization studies

http://www.managingtheuniversitycampus.nl
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)

http://www.managingtheuniversitycampus.nl

 fotos: DUWO

Community building

Student / PhD housing – new life for old building (photo DUWO)
2. The innovative and flexible knowledge economy can bring new life to obsolete (industrial) heritage buildings.

A economia de conhecimento que é inovadora e flexível pode trazer uma nova vida aos edifícios obsoletos de herança industrial.
3. It takes a crisis — for instance a fire — to change the academic workplace

É necessário uma crise — por exemplo um fogo — para alterar as instalações académicas.
Movie 1 – “The unforgettable fire”

Emergency management
< 3 days after the fire

Found a ‘new’ building within 10 days
sustainable = re-use

ASSIGNMENT: relocate 3300 students and > 800 employees
DEADLINE: renovate 32,000 m² < 6 months
+ new construction 4,000 m² < next 6 months

http://www.managingtheuniversitycampus.nl
Phase 1 & EAST: 16,000 m² gfa
In use September 2008

Phase 2 & WEST: 16,000 m² gfa
In use November 2008

Phase 3 – GLASS HOUSES: 4,000 m²
In use May 2009

Undergraduates < 4 months after fire
Project ready < 1 year

Design the building as a city
– reduce footprint (-15%), more shared / public space

32,000 m²

42,000 m²

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Private → Public space
Contextual Concept: Connectivity and variety

GOALS ORGANISATION
1. Community building
2. More effective support of education, research & management
3. Creating the place to meet
4. Stimulate social interaction & intellectual interaction
5. Flexible use of facilities
6. Sustainable

Reducing m², but improving...
Quality of place (interior design)

Reducing m², but improving...
Quality of place (cultural heritage)

http://
www.managingtheuniversitycampus.nl
Reducing m2, but improving...  
Quality of life (campus & city)

the academic workplace place → building → city

TRADE-OFF
one territorial office workplace → many non-territorial places

4. The campus of the future is a city

"campus of the future"

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

"to share or not to be..."

"campus of the future"
Studio space

- student back at the faculty
- 6 m² usable per workplace
  → became less after decision process
- tables are assigned to groups of students per semester (no permanent territory)
- smart use of space (by smart scheduling)

CREATE "HOME AWAY FROM HOME"

Library: quiet place to study

Changing the academic office

Office space

- no individual territory
- 12 m² usable per FTE
  → became more after design process
- activity related concept

a. SILENT ROOMS
b. LIVING ROOMS
c. MEETING ROOMS
  - formal / informal
d. TEAM OFFICES

http://www.managingtheuniversitycampus.nl
students and academic staff sharing workspace → reducing the footprint, improving interaction

Public space

• usable space in corridors for informal meetings and work

Public space: design a building like in a city

Restaurants & bars

Changing the academic workplace

• from private to more public space
• from office space to a multifunctional working environment
• from individual to shared - “to share or not to be…”
• is expanding from a workplace to the campus and the city
• trading quantity (per user) for quality of the working environment
• from one assigned workplace to many meaningful workplaces or to finding the most comfortable workplace in every season
• increasingly paperless (paper determines territory…)

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THEORIES & FRAMEWORKS

1. Convince policy makers of role campus in performance university.
   AFTER OUR FIRE: BK CITY
2. Never waste a good crisis.
   NEW CONCEPTS TESTED
3. Use European heritage buildings as a competitive advantage.
   STRATEGIC CHOICES
4. Use European historical inner cities and collective qualities as a competitive advantage – to share or not to be

SHARING KNOWLEDGE IN EUROPEAN NETWORKS

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

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More about the book and research
"Managing the university campus"
http://managingtheuniversitycampus.nl
(see DOWNLOADS for hand-out)

Movie 2 – “The making of BK city”

http://www.managingtheuniversitycampus.nl