The campus of the future is a city

campus planning becomes urban planning

Dr. ir. Alexandra den Heijer
associate professor - Faculty of Architecture and the Built Environment
Delft University of Technology (TU Delft), Netherlands

The European Campus
- accommodating Europe’s knowledge capital
- talent → innovation → capital → (regional) economy
- quality of place matters

PROPOSITIONS
1. Students become tourists – Cherish the European academic heritage
2. The European campus is an enabler and disabler for Europe 2020
3. Campus planning is collective task of universities & cities

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

more info: http://managingtheuniversitycampus.nl
**Campus model A**
The campus competes with the city – "new town development"

**Campus model B**
Network university → "UniverCity"

---

**Top 10 - Why study abroad?**

1. See the world  
2. Education  
3. Take in a new culture  
4. Improve language skills  
5. Career opportunities  
6. Find new interests  
7. Make lifelong friends  
8. Personal development  
9. Graduate school condition  
10. Life experience

http://www.internationalstudent.com/study-abroad/guide/ten-benefits-to-studying-abroad

---

more info: [http://managingtheuniversitycampus.nl](http://managingtheuniversitycampus.nl)
PROPOSITIONS

1. Students become tourists – Cherish the European academic heritage
   • location in inner city
   • heritage buildings: culture & industry
   • density of people
   • good public space
   • sense of place

Europe 2020

“Smart, sustainable, inclusive Europe” – European Commission

Europe 2020 puts forward three mutually reinforcing priorities:
   • Smart growth: developing an economy based on knowledge and innovation. → very dependent on availability talent - LOCATION
   • Sustainable growth: promoting a more resource-efficient, greener and more competitive economy. → lower footprint, higher quality of PLACE
   • Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion. → place attachment, DENSITY of people

European campus - basic data

More than 20 mn students in EU higher education
More than 13,5 mn students in EU universities
“EU university” also provides doctoral education (Bachelor, Master, PhD)

RESEARCH
→ explored 870 EU universities
→ in 28 EU member states
→ university websites + national sources

170 mn m2 European campus
The European campus is a key asset in “the (global) Battle for Brains”

**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...

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


→ 85 mln m² needs energy-efficient transformation
→ smart strategies required

Propositions

more info: http://managingtheuniversitycampus.nl
2. Low utilisation rates, high vacancy rates in offices, laboratories, classrooms.

→ high costs for underutilized space
→ smart planning tools required

3. Campus costs about 5% to 15% of university budget – and rapidly increasing – affecting their financial sustainability.

→ not enough resources available
→ smart investment strategy required

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

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 “univ-cities” are considered attractive places to live, work, be...
4. Campus costs about 5% to 15% of total costs
5. Negatively affects “financial sustainability” of universities

European campus as a disabler for Europe 2020
1. > 50% from 1960s/70s
2. Bad functional / technical state: renovations required
3. Low utilisation rates: high vacancy rates of offices, laboratories, classrooms
4. Campus 10-15% of total costs

PROPOSITIONS
1. Students become tourists – Cherish the European academic heritage
2. The European campus is an enabler and disabler for Europe 2020
3. Campus planning is collective task of universities & cities

Model A: “Traditional university”

Model B: “Network university”

Model C: “Virtual university”

Model A (2): “University college”

Campus of the future: model A – traditional university
- exclusiveness, elite & large
- can we still afford this?

more info: http://managingtheuniversitycampus.nl
Campus of the future:
**model B – network university**
- "campus is market place of knowledge"
- sharing the campus
- "univer-city"

Campus of the future:
**model D – University College**
small, broad, Bachelor in English, selected talent

---

more info: [http://managingtheuniversitycampus.nl](http://managingtheuniversitycampus.nl)
The campus competes with the city – “new town development”

**PROBLEM STATEMENT**

The campus competes with the city – “new town development”

**PREFERRED MODEL**

Network university → "UniverCity"

- combination of heritage, refurbished and new
- intensively used, encouraging innovation by social & intellectual interaction
- sustainable, energy-efficient
- low footprint: more quality than quantity
- shared space, less territorial

- city = campus

**PROPOSITIONS**

1. Students become tourists – Cherish the European academic heritage
2. The European campus is an *enabler* and *disabler* for Europe 2020
3. Campus planning is collective task of universities & cities
4. Lessons from BK city (our building)
The built environment can support innovation in technology campuses by using strategies that support the process of knowledge creation and diffusion in two ways. First, the design strategies of technology campuses can be used to –deliberately– accommodate in close proximity various users, whose activities and knowledge are close in relation. Second, the management strategies of technology campuses can be used to optimise such proximity while creating the opportunities for users to share activities and therefore, to strengthen the closeness of such relations.

Nowadays, universities, governments and industry increasingly build or expand technology campuses to encourage innovation for economic growth and development. With that assertion in mind, which has not been actually demonstrated to be true, technology campuses are built with similar characteristics: they are large-scale, clustered and (quasi)isolated built environments.