

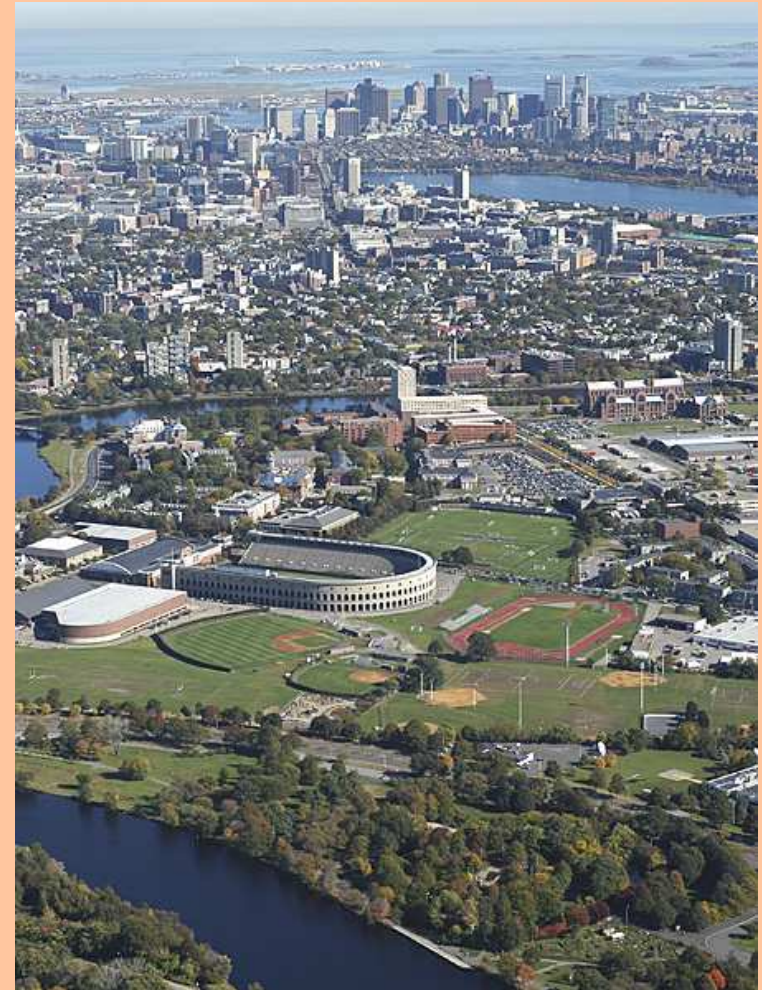
OECD Education Management Infrastructure Division
Higher Education Spaces & Places
For Learning, Education and Knowledge Exchange
University of Latvia, Riga: 6-8 December, 2009

UNIVER-CITIES IN THEIR CITIES

Collaborations and Conflicts

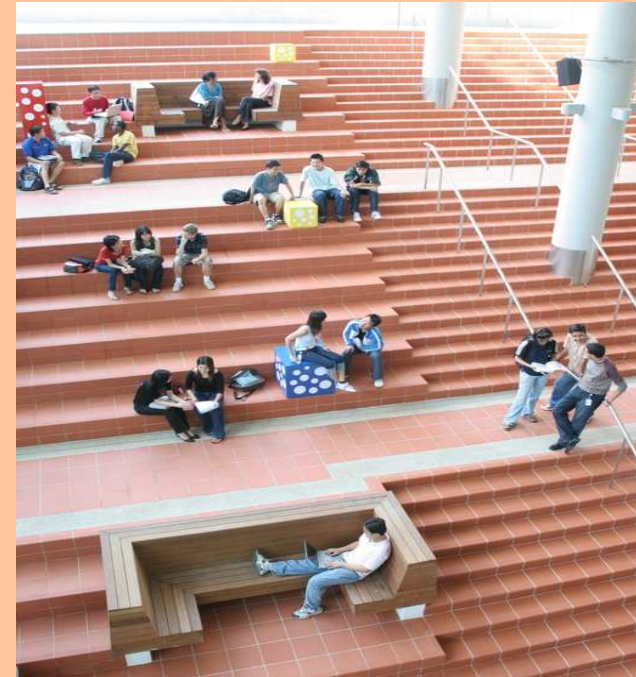
Professor John Worthington
Founder, DEG
Graham Willis Professor of Architecture, University of Sheffield
Professorial Fellow the University of Melbourne

www.degw.com



People + Places = Learning Places – 4 Themes

1. Sustainable learning and exchange across cities and regions
2. Innovative places for learning
3. New spaces for higher education
4. Managing resources to meet current and future needs



Cities and their UniverCities

University City



Lund, Sweden

- 100,000 People
- 42,000 Students
- 11,000 Graduates/Research
- 6,000 Distance/Online

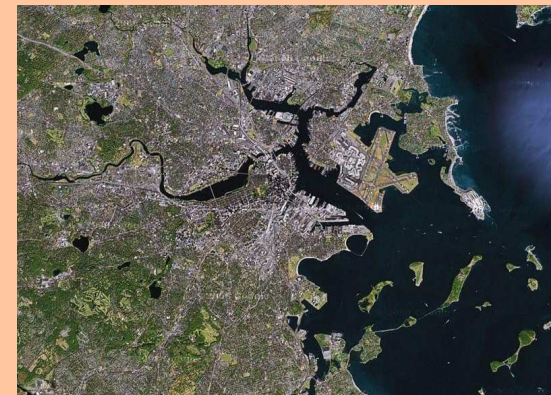
Knowledge City



Newcastle/Gateshead, UK

- Science City
- One North-East

UniverCity



Boston, USA

- Combined Universities, Business and City

Singapore University – Global Information Hub

Educations contributes 1.9% to GDP

2020 projected 4%

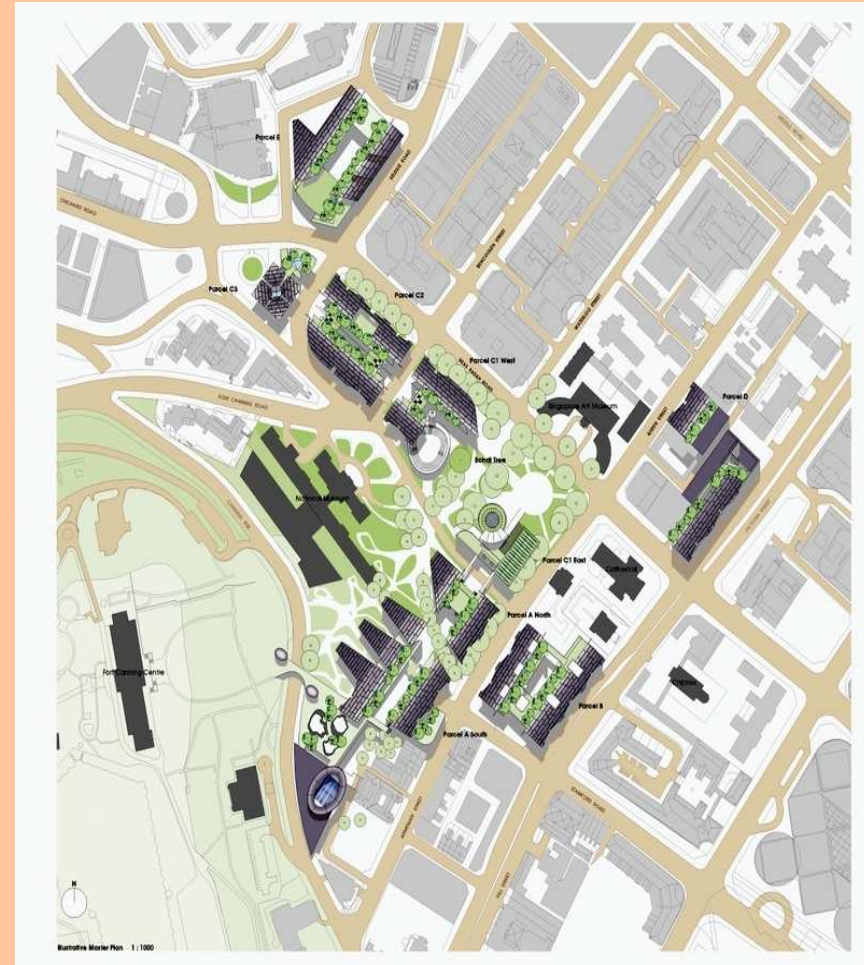
Direct employment: 47,000

Foreign Students: 50,000

Three Levels

1. World Class Universities (R&D)
2. Higher education meeting Singapore's needs
3. Private universities
 - Foreign
 - Commercial and Speciality

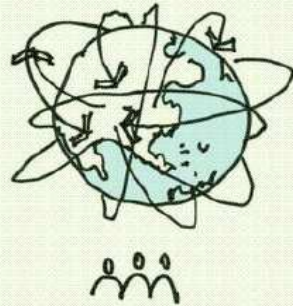
Developing Singapore's Education Industry



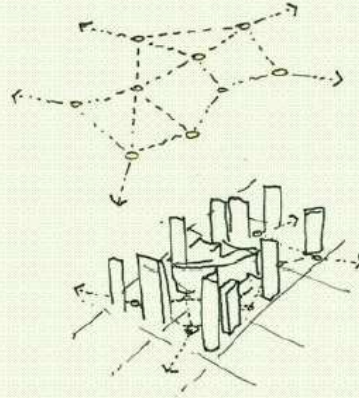
Singapore Management University

Edward Cullinan Architects

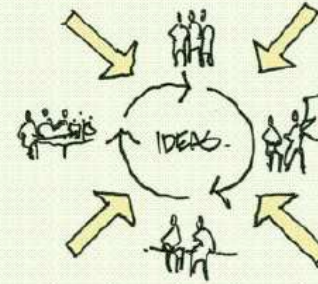
Effective Knowledge Communities



Globally Connected



Regionally Networked



Places for Exchange

1. Innovation and creativity drive productivity growth

2. Workforce incomes rise as output per worker rises

BUSINESSES

5. Availability of talented workforce in the locality attracts a concentration of businesses

6. Locality attains competitiveness through economies of agglomeration, productivity and innovation generated by concentration of businesses

WORKFORCE

LOCALITY

3. Rising incomes support rising quality of life / community & environment

4. Rising quality of life / community & environment attracts & retains talented workforce

Hassell/DEGW Smart Communities

Queensland Dept. of Employment, Economic Development and Innovation, 2009

Universities are networking within cities and across boundaries

University of Oresund

- 14 Universities
- 140,000 Students
- 10,000 Researchers
- 6,500 PhD Students
- 4000 International Students
- 800 International Partner Universities
- 8 Nobel Prizes
- 5th in Europe in Scientific Output



Information technology has changed the focus of the university

The Internet has changed the notion of place, time and space

New methods of learning and teaching

Student demography changing – life-long learning

Changing financial context – mixed economy

Increased competition - on resources

Student focused – increased participation

Blending of living, learning, working and leisure



New Ways of Learning

- **More collaborative**, active learning, hands-on experiences
- **Integrated**, multidisciplinary
- **Blended**, learning takes place anywhere/anytime, mobile technology with social activity
- **Immersive** with simulated or real-world experiences
- **Hybrid** activities, online with face-to-face, mixed reality



Rensselaer Polytechnic Institute



Harvard Simulation Center



Chalmers University

Shift in Space Use from Formal to Informal – Complimentary Spaces

- Thinking / Conceiving
- Designing
- Collaborating
- Debating
- Documenting
- Implementing
- Practising
- Sensing
- Operating



Fixed - Bookable



Flexible – Freely Available

Learning in a diversity of settings within new learning landscapes

Knowledge exchange

City



Advice



Transfer Knowledge



Social



Learning spaces

Study



Teach



Skills



Work



Lifestyle facilities

Catering



Sports/Health



Residential



Retail



Broaden the range of settings – Support diverse pedagogies

- **Thinking/conceiving** spaces (spaces for deliberating, brainstorming)
 - **Designing** spaces (spaces for putting structure, order, and context to free-ranging ideas)
 - **Presenting** spaces (spaces for showing things to a group)
 - **Collaborating** spaces (spaces for enabling team activities)
 - **Debating** or **negotiating** spaces (spaces for facilitating negotiations)
 - **Documenting** spaces (spaces for describing and informing specific activities, objects, or other actions)
- **Implementing/associating** spaces (spaces for bringing together related things needed to accomplish a task or goal)
 - **Practicing** spaces (spaces for investigating specific disciplines)
 - **Sensing** spaces (spaces for pervasively monitoring a location)
 - **Operating** spaces (spaces for controlling systems, tools, and complex environments)

New Property Paradigm – Market Responsive



Core Space: Owned Space

- Icon & image space
- Special functions
- Operations HQ/Admin
- Centre for services



Flexi Space: Leased Space

- Leased UMUC-Branded space
- Auxiliary Operations
- UMUC-managed shared facilities with corporate, consortium or institutional partners



On Demand : Pay per Use

- Short term agreements in response to enrollments
- Leased classrooms at other institutions
- Presence in shared Higher Ed Centres
- Presence in non-UMUC branded facilities



Source: University of Maryland

Rethink space use, ownership and governance

SPECIALIZED

Tailored to specific functions

formal teaching, generally enclosed

- *owned within departments, subject specific*
- *specialized equipment*
- *high levels of performance specification*
- *higher security concerns*

GENERIC

Range of classroom types

formal teaching, open and enclosed

access by schedule

- *generic teaching settings*
- *Limited in flexibility by furnishings*
- *used when scheduled*

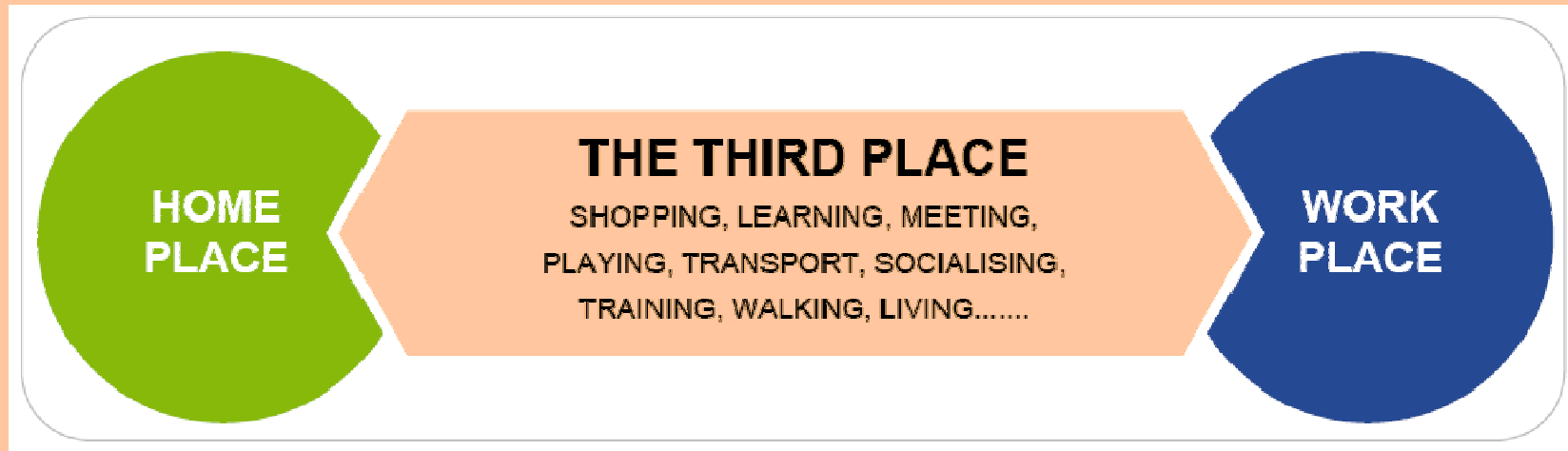
INFORMAL

Wide range of setting types:
informal and formal, social, open and enclosed

Public, visible, distributed, inclusive

- *encompass richer range of settings*
- *allow choice*
- *loose fit, unscheduled*
- *work as a network of spaces rather than singular settings*

Univer-Cities: The City as a Focus for Study and Learning



UniverCities – the city as a laboratory for learning

	Learning	Communities	Practice
FORMAL	 UNIVERSITY OF BIRMINGHAM		RIBA 
INFORMAL	ARNOLFINI	 creative foundation	THE ACADEMY OF URBANISM

New Space Models

Traditional categories of space are becoming less meaningful as space becomes less specialized, boundaries blur, and operating hours extend toward 24–7

Space types designed primarily around patterns of human interaction rather than specific needs of particular departments, disciplines or technologies

New space models focus on enhancing quality of life as much as on supporting the learning experience

*redefining
'balance' space
circulation as glue*



*circulation as
event space*

*more freely
available space
group project work,
solo work*



Blended spaces to support blurred activities

Work, eat, talk, relax

Social learning, be with others

Support multiple activities with diverse settings

Flexible, allow user control and manipulation

Exploit food as a catalyst

Blending of information-based work and entertainment

“multiplexing of functions”

(Bill Mitchell)



Chalmers University

Create 'Club' settings

- **Drop-in use**, intermittent scheduling, with bookable space
- **Highly serviced**, with support and expertise available
- **Choice of settings**, both shared and individual
- **Rich interactive environments** supporting collaboration

“appropriatable space”

(Bill Mitchell)



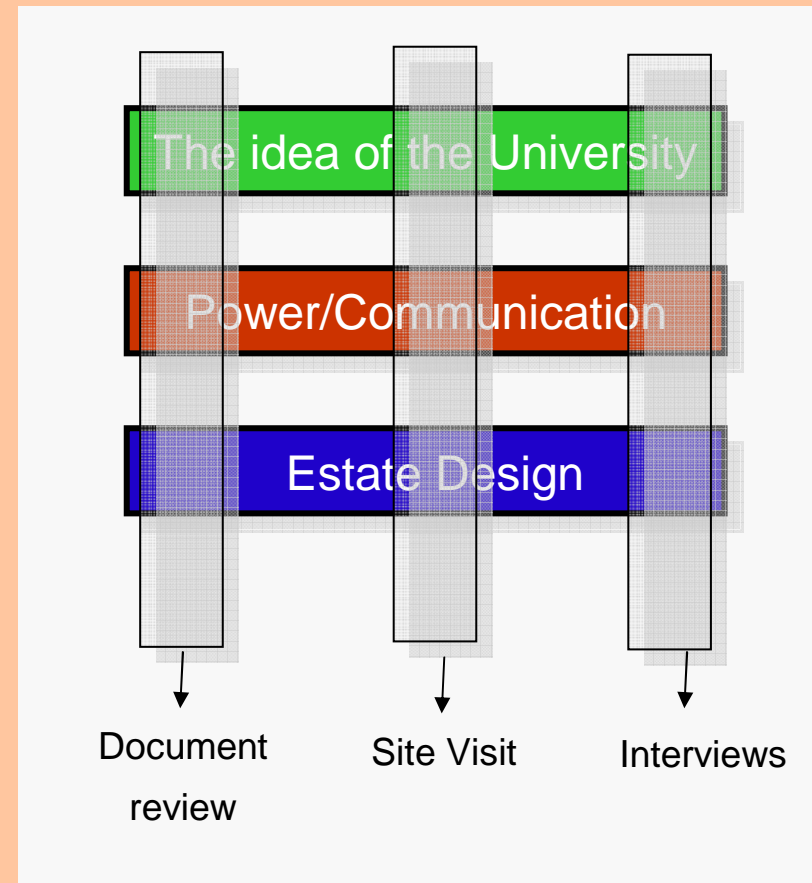
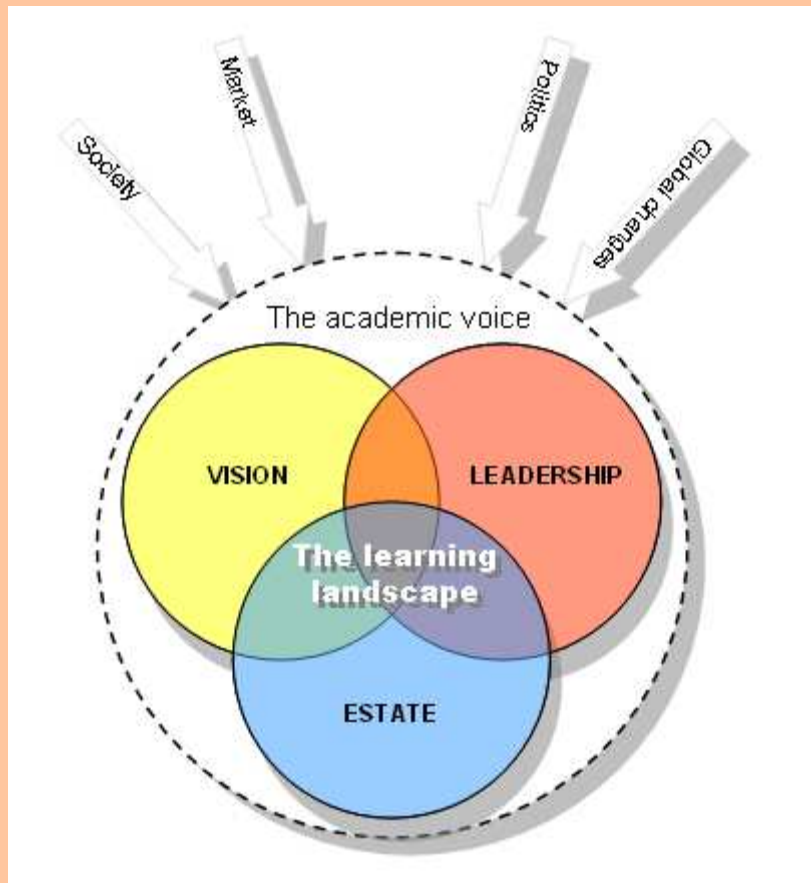
Support collaborative activity



- Comfortable, inviting settings

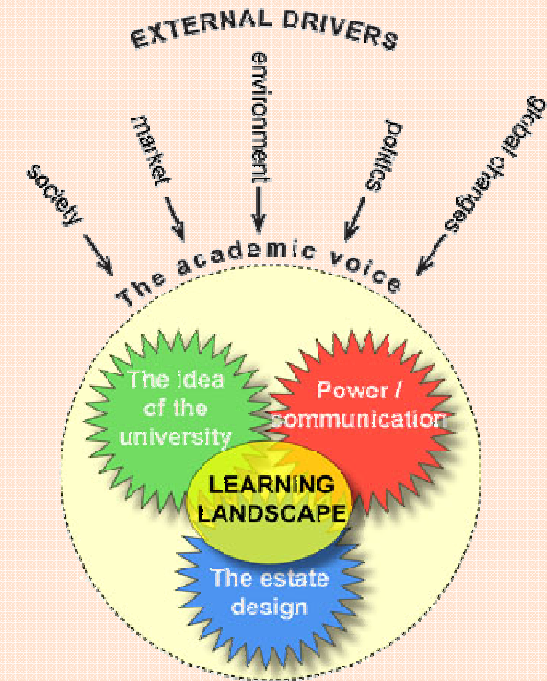
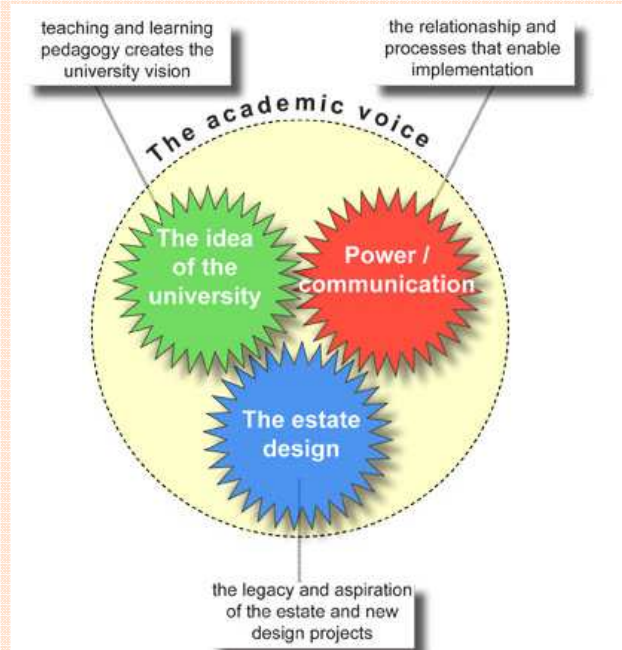
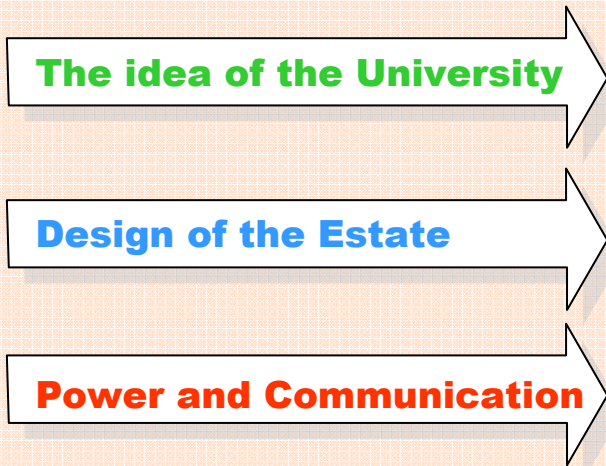
- Interactive, shared wall screens

Learning Landscapes – an Approach to Re-Imagining the University

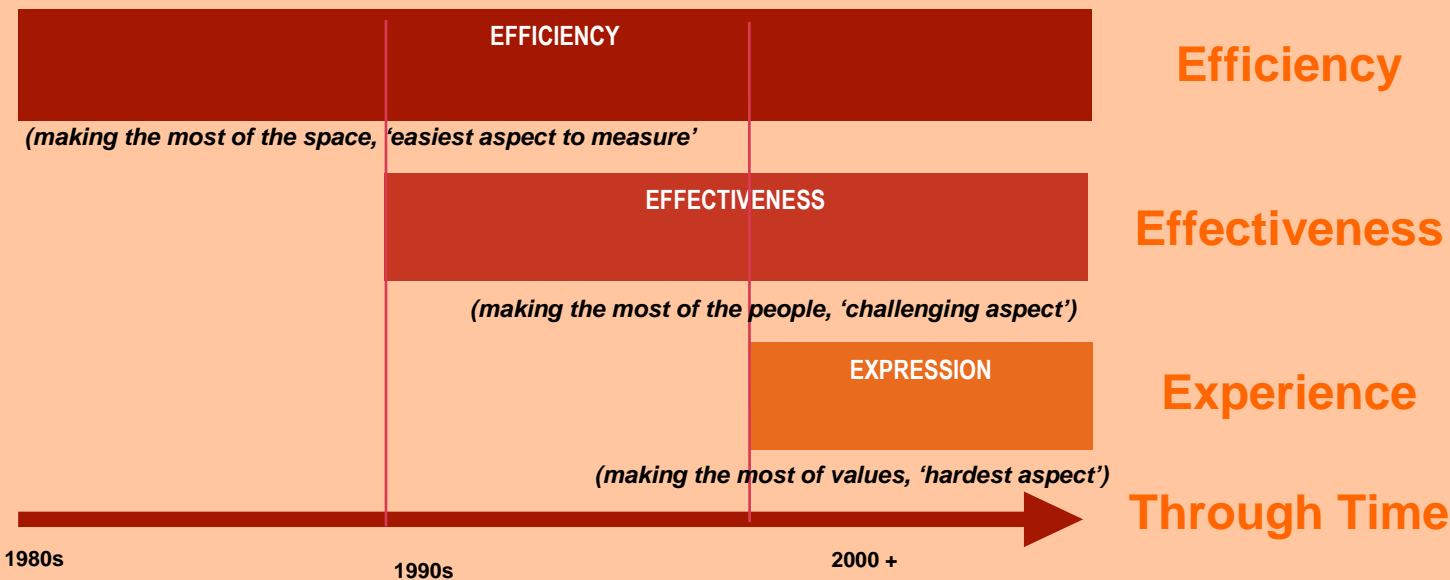


Source: DEGW & CERD University of Lincoln
HEFCE Learning Landscapes in Higher Education 2009

University Dimensions – The Components for Change



What we look for in the Learning Landscape



- EXPRESSION
- EFFICIENCY
- EFFECTIVENESS
- EXPERIENCE



campus



cluster



building



fit out

Articulating the Vision



EXPRESSION

Identity and brand

Condition and maintenance

EFFICIENCY

Circulation and permeability

Flexibility

EFFECTIVENESS

Way finding and orientation

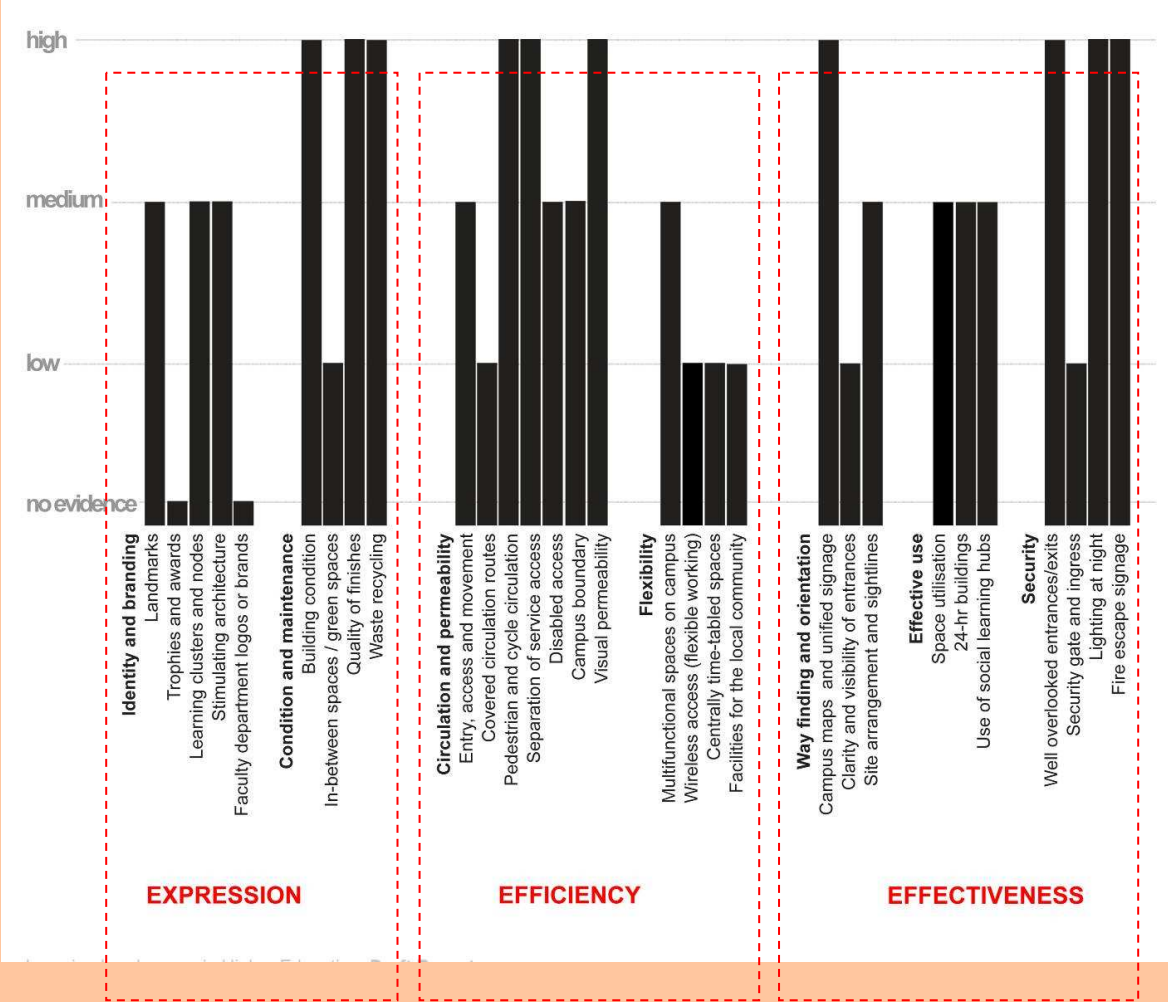
Effective use

Security

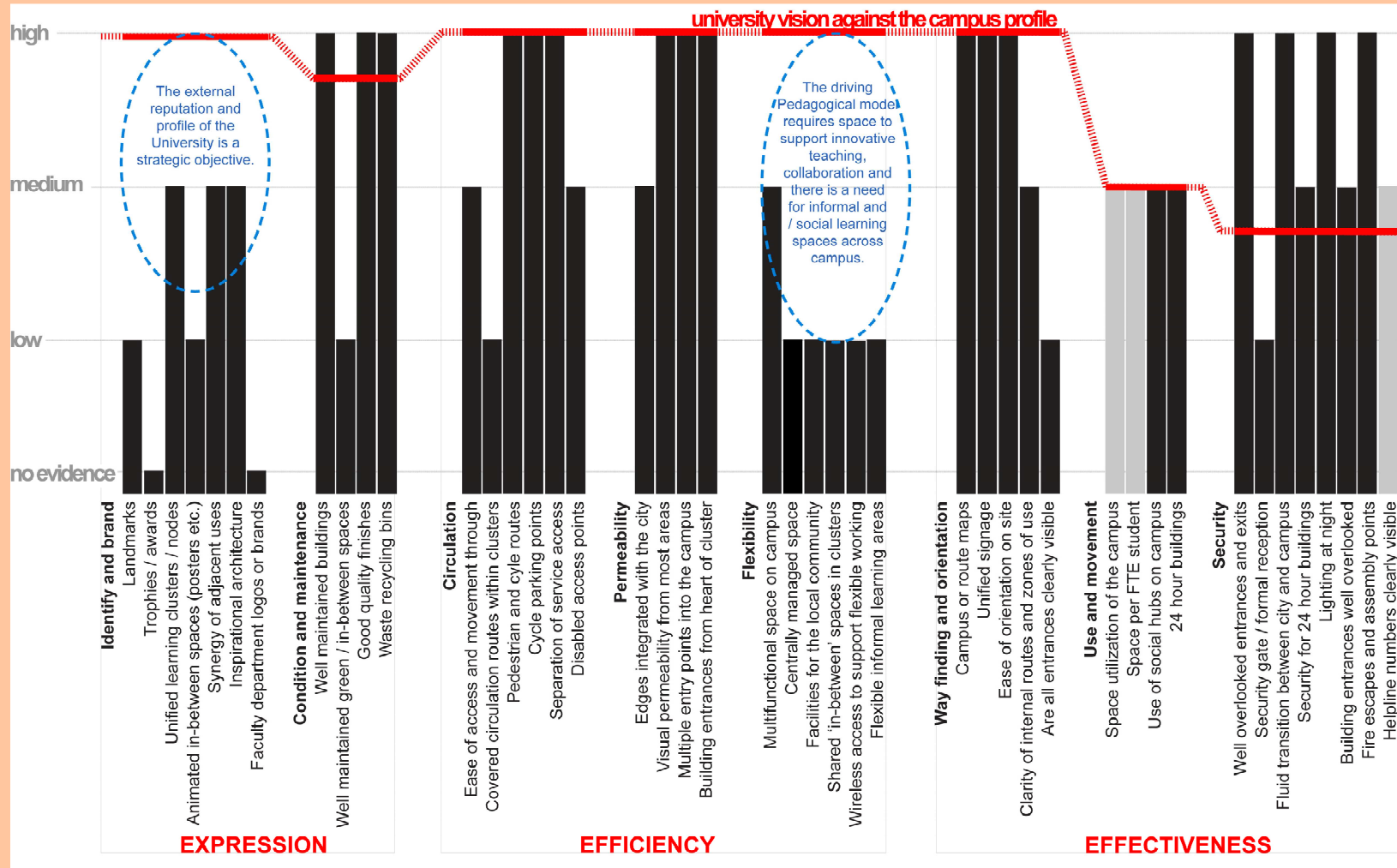
The Campus Profile

A mapping tool that begins to cover 'hard' physical /tangible aspects as well as the important but more challenging 'soft' non tangible aspects.

The tool is essentially a matrix that investigates spatial criteria that are encompassed in three fundamental qualities of good design.



Identifying the gaps - Estate vs Vision



Learning Landscapes – comparative studies



UNIVERSITY OF LINCOLN

Location: City

No of students (FTE): 15,000 (student numbers '08/09)
Postgraduate 1170
Undergrad 9076

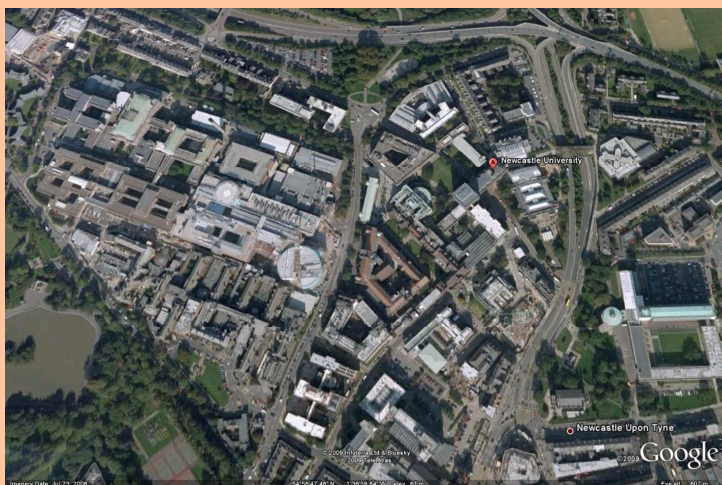
Staff:

Academic: 766 (548 current academic/research staff and 218 hourly paid lecturers, 2008/2009 academic year)
Support: 652

Key faculties:

Art, Architecture & Design
Health, Life & Social Sciences
Media, Humanities & Technology

Total area of campus: 20 ha



NEWCASTLE UNIVERSITY

Location: City

No of students (FTE): 18,878
Postgraduate: 4,723 (as at December '08)
Undergraduate: 14,155 (as at December '08)

Staff: 4,412

Academic: **1,155+873** Research (as at 31 October '08)
Support: **2,384** (as at 31 October '08)

Key faculties:

- SAGE
- HASS
- Medical Sciences

Total campus area: 15.96 ha

Learning Landscapes – comparative studies



UNIVERSITY OF YORK

Location: Rural

No of students (FTE): 11,629 (as at 1 December 2008)

Post graduate: 2,678

Under graduate: 8,951

Staff: 2,863 (as at 1 December 2008)

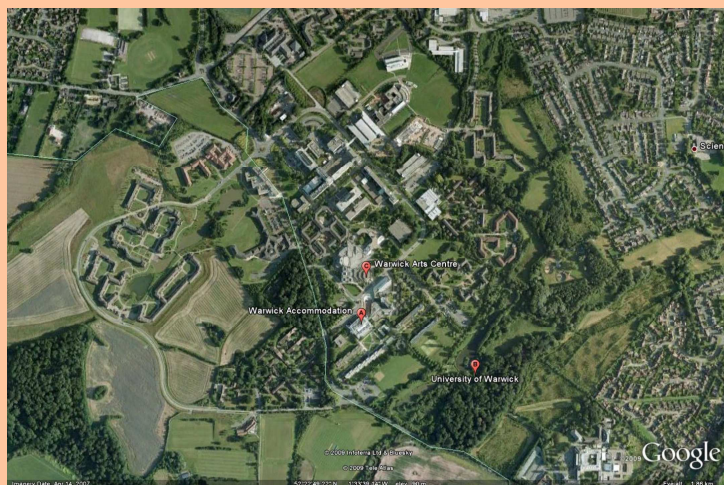
Academic: 633 (defined as ART)

Support: 2,230

Key departments:

Archaeology, Biology, Chemistry, Computer Science, Economics and Related Studies, Educational Studies, Effective Education, Electronics, English and Related Literature, Environment, Centre for Health Economics, Health Sciences, History, History of Art, Hull York Medical School, Language and Linguistic Science, York Law School, Centre for Lifelong Learning, York Management School, Mathematics, Hull York Medical School, Music, Philosophy, Physics, Politics, Psychology, Centre for Reviews and Dissemination, Social Policy and Social Work, Sociology, Theatre, Film and Television

Total area of campus: 87ha (figure as reported to EMS)



WARWICK UNIVERSITY

Location: City

No of students (FTE): 16,733

Postgraduate: 5,299

Undergraduate: 11,434

Staff: 5,069

Academic: 1,752

Support: 3,317

Key faculties:

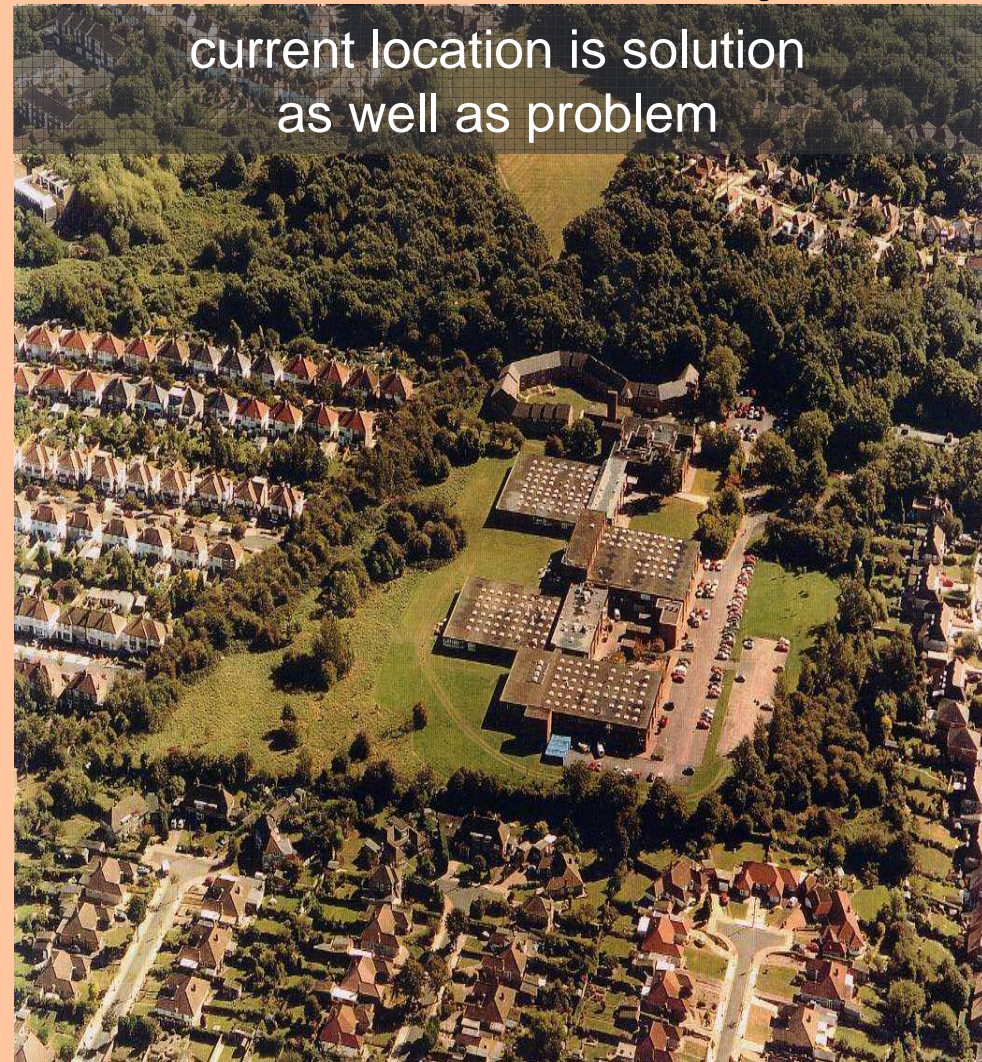
- Arts
- Science
- Social Sciences
- Medicine

Total campus area: 421.56 ha

Ravensbourne College of Design & Communication

Strategic Brief: DEGW

- 1,400fte students with distinctiveness based on creative exploitation of digital technologies within design and communications
- mostly aged between 18-24
- wide range of backgrounds
- all full-time (part-time option at MA)
- 75% from local catchment area



Next to London's Millennium Dome



close to creative industries
excellent public transport
kick-starting major urban regeneration
design competition: foreign office architects

Opportunity to create a new educational model

part college *teaching, learning*

young practitioners (rather than students)

fully professional outcomes

networked college (not doing everything itself)

part lab *experimentation, development*

idea generator, development projects

interdisciplinary, multi-skilled teams

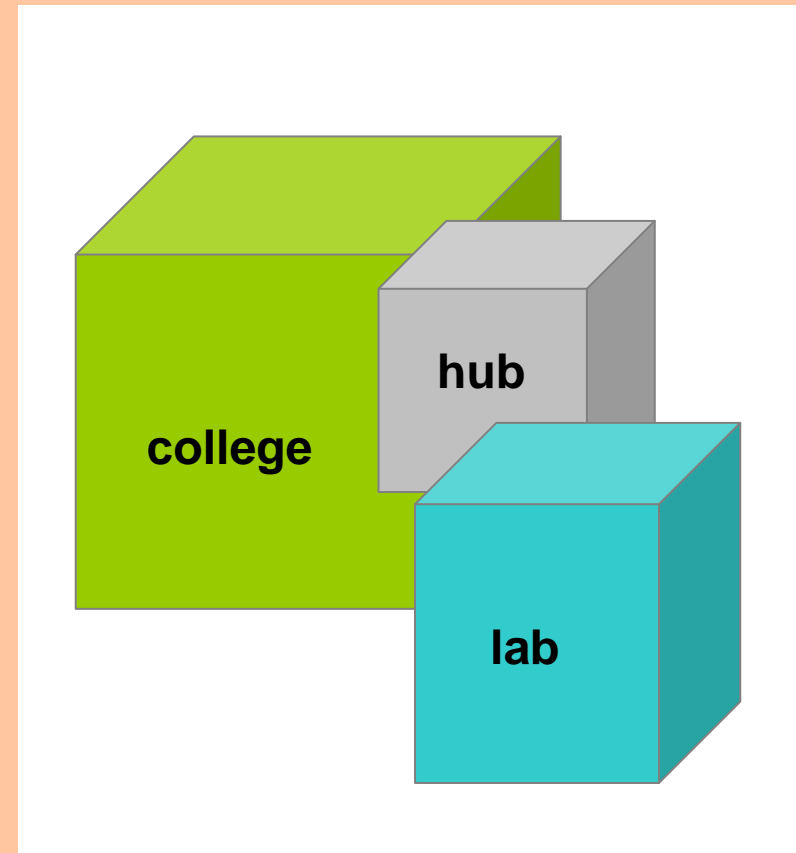
international innovation network and influence

part hub *new ideas/services to market*

commercial evaluation of ideas

copyright & ip services

collaboration with others



An educational model that focuses on the learner

	level one connecting people	level two supporting programmes	level three matching industry
curriculum	independent learning	structured learning	facilitated learning
settings	open access	programme bookable	college bookable
technology	general provision on personal devices	enhanced provision on personal/fixed devices	advanced provision in fixed locations
teachers	general assistance	timetabled assistance	specialist assistance
services	administrative	academic/technical	specialist services

Combination of settings and accessibility – 50% Open Access

Teaching Facilities



level one
open access
connecting people



level two
programme bookable
supporting programmes



level three
college bookable
matching industry

Studio Facilities



level one
open access
connecting people

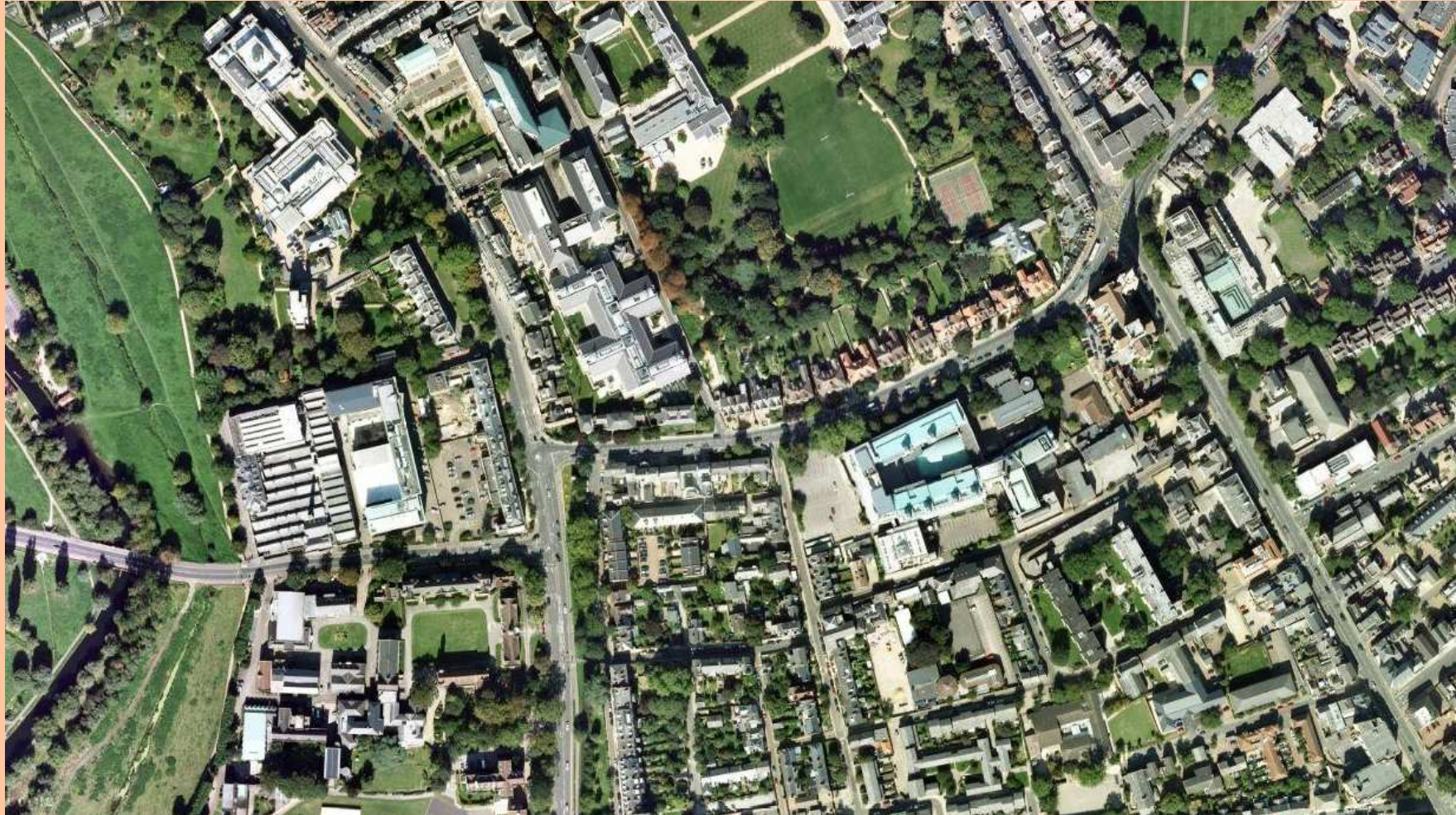


level two
programme bookable
supporting programmes



level three
college bookable
matching industry

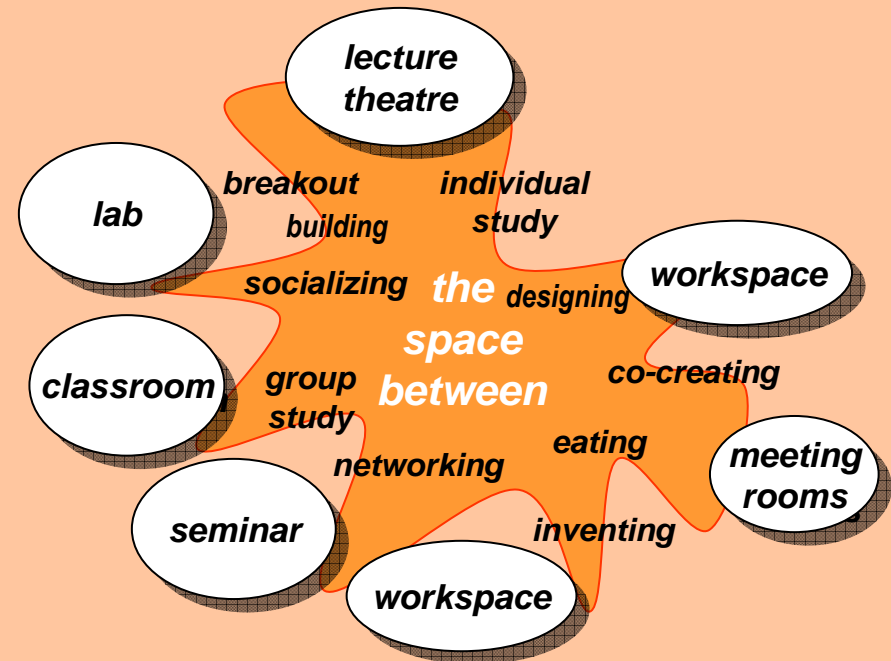
Embracing paradox – collaborations and conflicts



Cambridge – big-scale science in a historic setting

Integrated thinking - linking the vision and the reality

- Improve the quality of the learning experience
- Expand academics expectations of amenity
- Increase the range of learning settings
- Change the paradigm – Intensify the use of space and time
- Blur boundaries – share with partners
- Reconsider the business model
- Maximising the value of the brand



Focus on managing a process for change – PEOPLE, PLACE, PROCESS