Future Learning Environments
- Finnish Insights

Suvi Nenonen
Aalto University
Agenda

• Research background
• Definitions
• Some Aalto Campus Insights
• Case InnoOmnia
• Conclusions
Future Learning Environments
OPTILA-project (2011-2014)
Spaces and services for learning and new knowledge creation

VISION
University campus is an open, inspiring and attractive interdisciplinary and international meeting arena where new knowledge is created and learned effectively, and where knowledge is quickly utilized in improving competitiveness, new business and well being.

http://indoorenvironment.org/
### Goal of the project

The goal of the project is to investigate how to get benefit out of the current international reputation in educational achievements and how to develop the world class learning environments aligned with the latest educational knowledge and creative ways of learning.

<table>
<thead>
<tr>
<th>The case studies aim to increase understanding how new learning theories effect to traditional learning environments.</th>
<th>The aim is to increase the business potential to export the learning environments which have been supporting the success in PISA measurements.</th>
</tr>
</thead>
<tbody>
<tr>
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<td><a href="http://indoorenvironment.org/">http://indoorenvironment.org/</a></td>
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</table>
# Future Learning Environments

**University Properties of Finland**

Transforming spaces, places and services as learning and new knowledge creation arenas

<table>
<thead>
<tr>
<th>Future Learning and User Needs</th>
<th>Design Solutions and Usability</th>
<th>Social Responsibility and Energy Efficiency</th>
<th>Partnership and Management</th>
</tr>
</thead>
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[http://indoorenvironment.org/](http://indoorenvironment.org/)
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Tila  Space  Paikka  Place

Aalto University

Space, Place & Learning
Simon Kitto, Scott Reeves, Jonas Nordquist
Physical, virtual and social places

VIRTUAL

BITS

VIRTUAL

BRAINS

SOCIAL

INTERACTION

PHYSICAL

BRICKS
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

Professor John Worthington, co-founder of DEGW
Universities in their Cities: collaborations and conflicts, 9.12.2009 Riga OECD conference
Utilisation rate in general

Typical school space utilisation = 16%

Typical university space utilisation = 15–20%
Future campus: Three directions, six scenarios

1. ATTEMPTING TO MAINTAIN THE STATUS QUO
   - Scenario 1.a: "Bureaucratic School Systems Continue"
   - Scenario 1.b: "Teacher exodus - The 'meltdown scenario'"

2. RE-SCHOOLING
   - Scenario 2.a: "Schools as Core Social Centers" Scenario
   - 2.b: "Schools as Focused Learning Organisations"

3. DE-SCHOOLING
   - Scenario 3.a: "Learning Networks and the Network Society" Scenario
   - 3.b: "Extending the Market Model"

http://www.senerlearning.com/blogs/six-scenarios-compared-oecd-scenarios
Future scenarios: Aalto Campus Vision

Our Students:
Creating a world-class student learning experience that engages and offers freedom of choice requires that we bring undergraduates together on a single site.

Our Faculty and Staff:
Co-location enables connections between researchers that stimulate the production and sharing of new knowledge.

Our Economy:
Aalto’s investment priority will always be our people— not walls. Therefore, even as we develop, expenditure on campus facilities should stay around the same level as today. This requires that we focus resources and share facilities.

Our Community:
Interactions with society are supported through an open and vibrant centralized campus that provides opportunities for people with different backgrounds and interests to meet.
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Identified challenges

**USE**
- Schedule 24/7!
- Compute!
- Multi-use!
- Interact!

**MANAGE**
- Use corridors!
- Go virtual!
- Link data!
- Spot synergies!

**SUPPORT**
- Act transparent.
- Prioritize people.
- Administer bottom-up.
- Proact.

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Tuokko, Mäikyrö, Rytkönen
Understanding learning environments

- **Higher Concentration**:
  - Intensive collaboration zone
  - Intensive individual work zone

- **Lower Concentration**:
  - Short-time pop-up zone
  - Open collaboration zone

**Axes**:
- COLLABORATION: Higher to Lower
- CONCENTRATION: Higher to Lower
Open collaboration zone
- Interplay area, culture hub

“To meet and greet”

“the best setting for transcending traditional boundaries in research and art”
"To meet and greet"
How to facilitate?

<table>
<thead>
<tr>
<th>Space type % of the total space resources NIA</th>
<th>Sub space types</th>
<th>Aalto University</th>
<th>Design Factory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open spaces and passages</td>
<td>Corridors, entries, halls, lobbies, waiting areas</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>Student spaces</td>
<td>Cafes, restaurants, student union, student clubs</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

- Can be facilitated in a myriad of ways – what is the action, what is the purpose?
Intensive collaboration zone:
- Learning venue, open studio

“To collaborate”

“rich connections supporting open innovation and social interaction”
Flexibility
“Collaboration”

ADF Small teamwork rooms

ADF “new lecture halls”

Otakaari 5, Riihi classroom

Otakaari 5, classroom H302
“To collaborate”
Examples of potential facilities to be ‘synergized’
Intensive individual work zone - Research platform

“Heads down time”

“a multidisciplinary learning environment and freedom of choice”
“Heads down”
Satisfaction measures examples
Short-time pop-up zone:  
- Mural remixed (gallery)

“Transitory spaces”

"efficient use of limited resources and a lower environmental impact"
Experimental pilot projects and their stories mapped in Aalto campus

- Venture Garage
- Design Factory
- ADDlab
- SunDeck
- Riihi

Aalto University

Österllund
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InnoOmnia
- welcome
Guidance

Suunnat selville
EcoDesign shop
Curriculum and spaces
Lobby
Upstairs
Meeting place
Meeting place
Kitchen and cafe
Meeting rooms
Heads down working
Workshops
Wellness center
Spa
Restaurant
Shared officeroom
Rest
Shared office room
Plants
Toilets
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User groups
Managing the university campus (Den Heijer, 2011)
Space management

Managing the university campus (Den Heijer, 2011)
Place management

Managing the university campus (Den Heijer, 2011)
Thank You!
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