

EARNING SPACE FORECAST: Spatial Impact of the Horizon Report 2015



What trends & technologies will impact your campus in the next 5 years?









http://cdn.nmc.org/media/2015-nmc-horizon-report-HE-EN.pdf

| TRENDS | |
|-------------|--|
| 1 - 2 YEARS | 1. Increased Blended Learning |
| | 2. Redesigning Learning Spaces |
| 3 - 5 YEARS | 1. Growing Focus on Measuring Learning |
| | 2. Proliferation of Open Educational Resources |
| > 5 YEARS | 1. Advancing Cultures of Change & Innovation |
| | 2. Increasing Cross-Institution Collaboration |

| TECHNOLOGIES | |
|--------------|-----------------------------------|
| < 1 YEAR | 1. Bring Your Own Device (BYOD) |
| | 2. Flipped Classroom |
| 2-3 YEARS | 1. Makerspaces |
| | 2. Wearable Technology |
| 4-5 YEARS | 1. Adaptive Learning Technologies |
| | 2. The Internet of Things |

| CHALLENGES | |
|------------|--|
| SOLVABLE | 1. Blending Formal & Informal Learning |
| | 2. Improving Digital Literacy |
| DIFFICULT | 1. Personalising Learning |
| | 2. Teaching Complex Thinking |
| WICKED | 1. Competing Models of Education |
| | 2. Rewarding Teaching |











- 1. Increased use of blended learning
- 2. Redesigning learning spaces
- 1. Growing focus on measuring learning

3-5 years

2. Proliferation of open educational resources



- 1. Advancing cultures of change & innovation
- 2. Increasing cross-institution collaboration





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years





Blended Learning = F2F + online

1. Increased use of blended learning



1 http://www.94669.mrsite.com/USERIMAGES/Retention%20 literature%20review.pdf







Blended Learning = F2F + online

1. Increased use of blended learning

Spatially

- access to wi-fi in classrooms & informal learning
- access to digital infrastructure in classrooms & informal learning
- enable various concurrent activities
- BYOD friendly
- media hubs (individual & group) with acoustic treatment





UNSW Business School | Architects: Woods Bagot

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PAS

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UTS Transaction Zone | Architects: Woods Bagot







2. Redesigning learning spaces







From these:







Trends 1 - 2 years





From these:







To these:



UTS, Building 5 | Architects: Woods Bagot



UNSW Business School | Architects: Woods Bagot



Trends 1 - 2 years

University of Melbourne Learning Lab | Architects: Blomquist Wark











2. Proliferation of open educational resources

Spatially

- less demand for lecture theatres
- more demand for informal learning spaces
 demand for media hubs (individual & group) for viewing online content





1. Advancing cultures of change & innovation





Entrepreneurial & Creative Thinking with industry partners to solve the world's problems

UNSW Innovation Lab concept | Architects: Woods Bagot

Technologies









2-3 years



- 1. Bring Your Own Device (BYOD)
- 2. Flipped Classrooms
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- 1. Bring Your Own Device (BYOD)
- 2. Flipped Classrooms
- 1. Makerspaces

2-3 years

- 2. Wearable technology
- 1. Adaptive Learning Technologies

4 - 5 years

2. The Internet of Things



1. Bring Your Own Device (BYOD)

Spatially

- no computer labs
- more informal learning spaces distributed across campus
- cafes as learning spaces
 classrooms designed for connectivity



UTS, Building 5 | Informal Learning Spaces



UNSW Business School | Flipped Classroom precinct

Real Property

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UNSW Business School | Flipped Classroom precinct



Macquarie University MUSE Project



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2. Flipped Classrooms



UNSW Australian School of Business | Architects: Woods Bagot





2. Flipped Classrooms

What did we learn?

- student-centred experience
- mobility of furniture
- plug in & play technology
- capacity 48/60
- equity of experience
- high & low tables
- colour

UNSW claims

- 1. Students get to know their peers better;
- 2. Students generate ideas easier.



UNSW Business School | Architects: Woods Bagot

"It's much more entertaining and interesting. And I find that the knowledge sticks a bit easier compared to sitting through a two hour lecture..."



UNSW Business School Architects: Woods Bagot

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"It's just really fun. You talk to different people. If someone doesn't know something, someone else will know it. So we kind of learn off each other."

"...it feels like we're not wasting class time." (Male student)



UNSW Business School | Architects: Woods Bagot

"I'm definitely enjoying my teaching more."





Technologies 2 - 3 years

1. Makerspaces

Key factors

- multidisciplinary
- encourage entrepreneurs
- promote innovation
- industry mentors
- industry events
- failure is necessary
- space needs to accommodate various equipment
- space able to expand & contract
- spaces for individuals or groups
- space for confidentiality





The campus environment is critical for attracting and retaining students.

1. Formal, informal and social learning experiences

- 2. Cultural exchange
- 3. Innovation exchange
- 4. Developing soft skills





HOW IS YOUR INSTITUTION DEVELOPING THE PHYSICAL CAMPUS FOR FUTURE TRENDS & **TECHNOLOGIES?**



