Evaluating Learning Spaces

workshop

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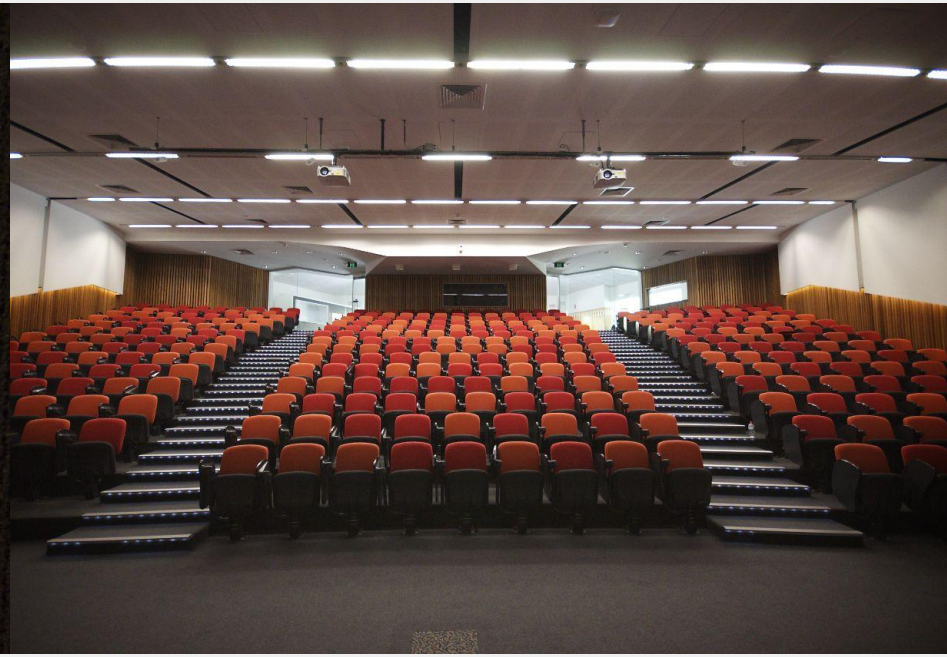
Workshop Outline

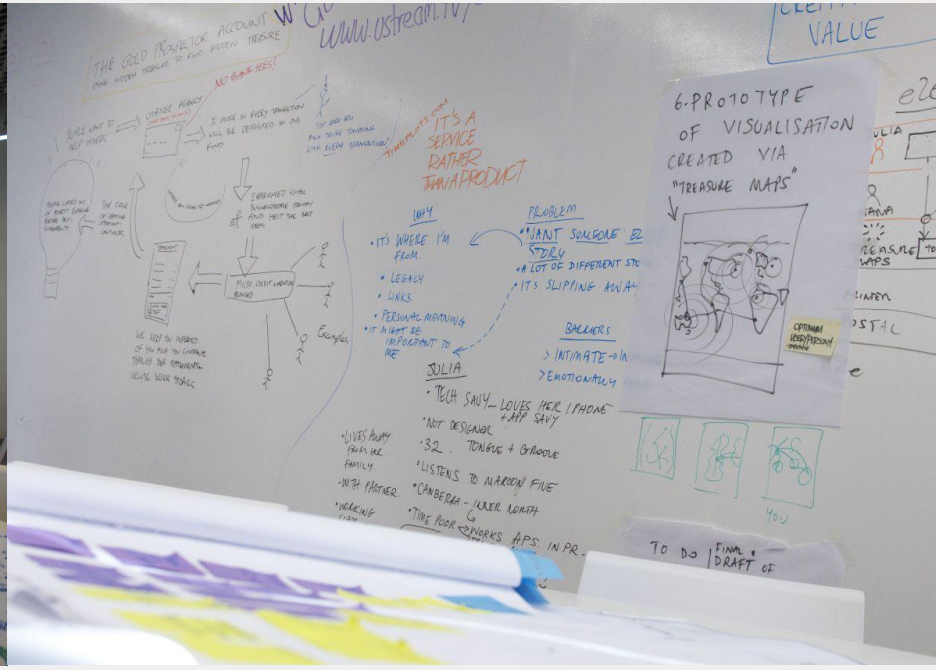


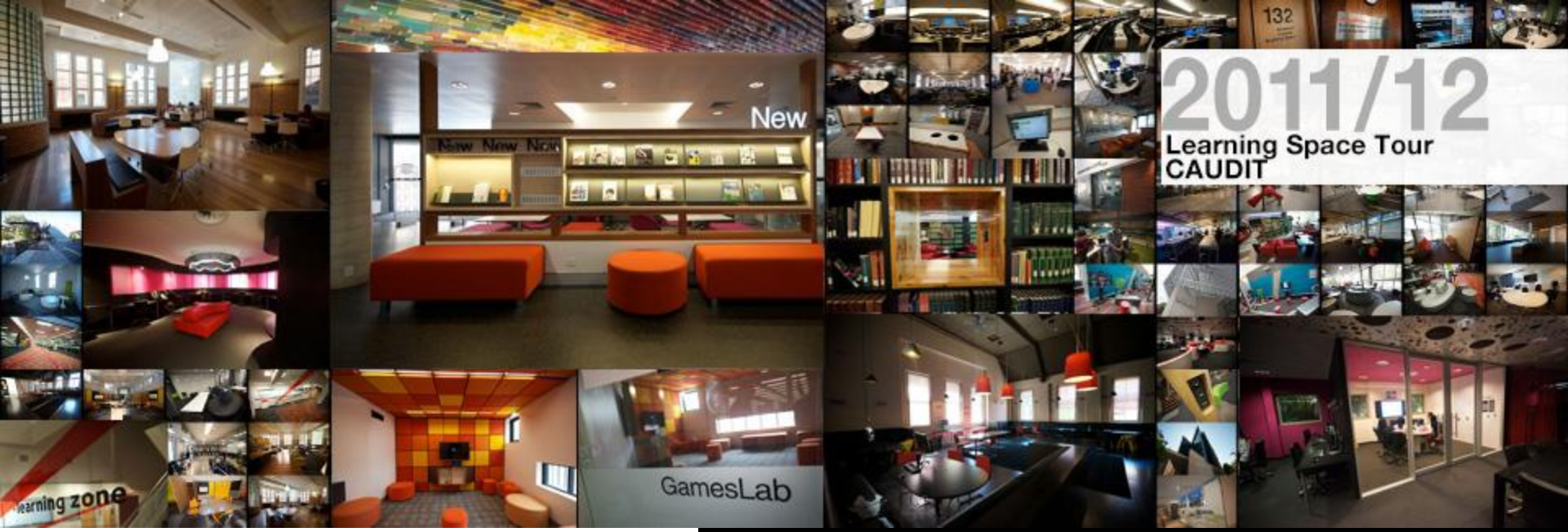
1) Where do we learn?

2) How do we evaluate learning spaces?

3) What kind of spaces should we be considering for the future?

yes you have to do something!





Where do we learn?

The University learning landscape

$11b, post GFC funding

EIF, TLCF (HE), BURF

What did it buy?

400+ images, http://bit.ly/cauditls

Mixed use study spaces

'online learner' learning landscape

Photos provided by online learners, OLT project

ACTIVITY ONE

Where do we learn?
Scope and map student learning spaces

Time Needed
15 minutes

Step 1
Discovery

Identify where students learn : 5 minutes

In groups, write down as many locations where students learn as you can.
Think about your own institution and particular style of learners there.
Tip: Also think beyond the campus!

Locations

Step 2
Interpretation

Place your locations on the learning spectrum: 5 minutes

Consider each of your locations and place them on the learning spectrum below.
At one end is UNSTRUCTURED SELF DIRECTED STUDY and the other is STRUCTURED TEACHER LED

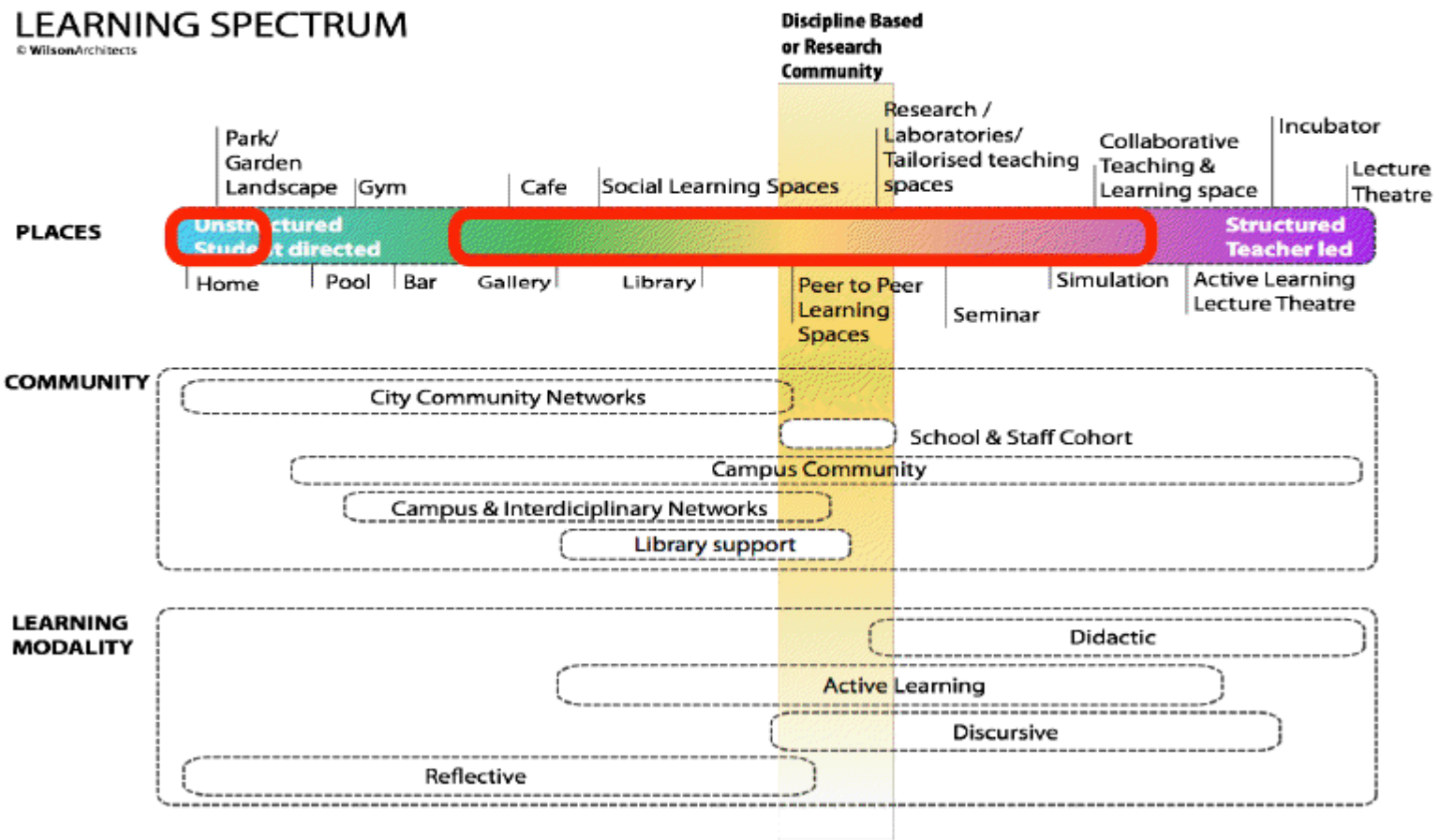
eg. location

UNSTRUCTURED / SELF DIRECTED STUDY — spectrum — STRUCTURED / TEACHER LED

Step 3
Feedback

Are there any commonalities? Which spaces do you prefer to learn in? 5 minutes

UniSA


LEARNING SPECTRUM
© WilsonArchitects
Discipline Based or Research Community
Park/ Garden Landscape
Gym
Cafe
Social Learning Spaces
Research / Laboratories/ Tailorised teaching spaces
Collaborative Teaching & Learning space
Incubator
Lecture Theatre
PLACES
Unstructured Student directed
Structured Teacher led
Home
Pool
Bar
Gallery
Library
Peer to Peer Learning Spaces
Seminar
Simulation
Active Learning Lecture Theatre
COMMUNITY
City Community Networks
School & Staff Cohort
Campus Community
Campus & Interdiciplinary Networks
Library support
LEARNING MODALITY
Didactic
Active Learning
Discursive
Reflective

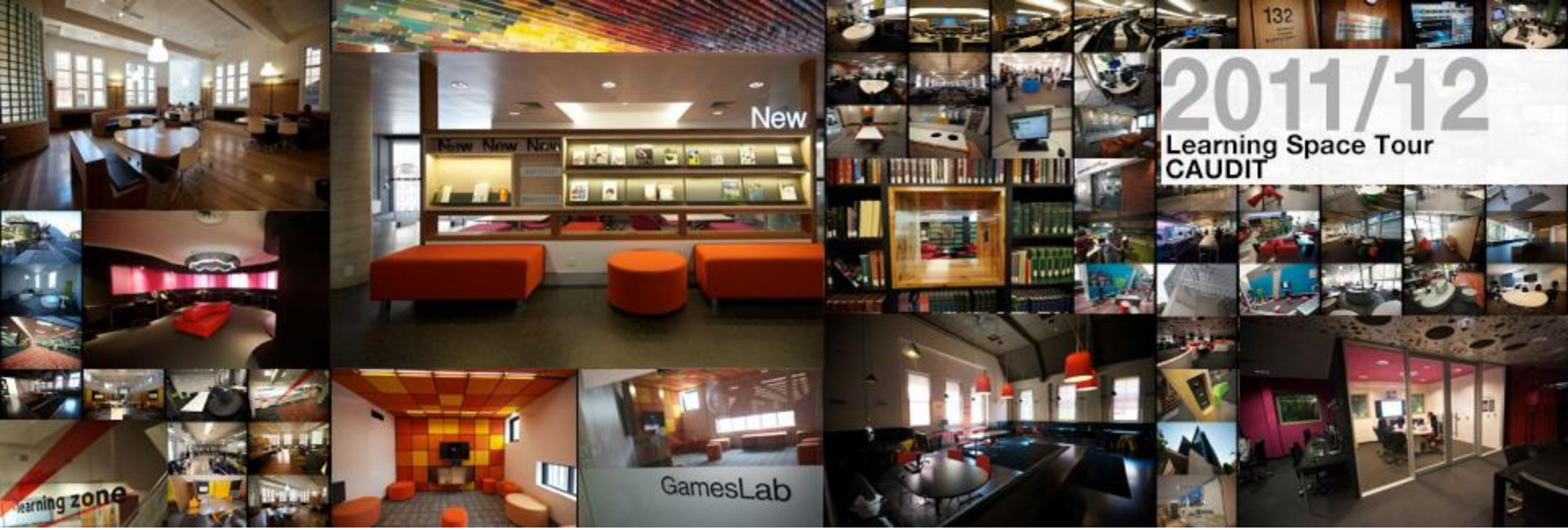
How do we evaluate?

Comparison Study Based on TEFMA 2007 Figures

Tuesday, 30 March 2010

Australian Institutions

Institution	Estimated Expenditure 2010-2015 AUD$M	Melbourne Institute Ranking 2007	Campus m² (GFA)	Campus m² (TEFMA UFA)	Campus m² (ARINA UFA)	UFA/GFA	EFTSL Internal	EFTSL External	EFTSL TOTAL	FTE Staff Academic	FTE Staff General	FTE Staff TOTAL	Area (GFA) m² / EFTSL	Area (ARINA UFA) m² / EFTSL	EIF Round 1 $M	EIF Round 2 $M
Australian National University	550	100	429,660	328,000	305,040	71.0%	11,233	75	11,308	1,470	2,075	3,545	38.2	27.2		90.0
The University of Melbourne	550	95	731,345	638,441	593,750	81.2%	34,297	380	34,677	3,371	3,778	7,149	21.3	17.3	90.0	33.8
University of Sydney	550	93	615,259	390,879	363,517	59.1%	28,125	6344	34,469	3,197	3,395	6,592	21.9	12.9	95.0	
The University of Queensland	500	84	630,881	372,573	346,493	54.9%	29,339	0	29,339	2,846	2,815	5,661	21.5	11.8	47.2	50.0
University of New South Wales	450	81	492,415	306,282	284,842	57.8%	22,003	6910	28,913	2,206	2,452	4,658	22.4	12.9	75.0	48.0
Monash University	450	75	654,513	395,408	367,729	56.2%	27,301	8914	36,215	2,908	2,886	5,794	24.0	13.5	89.9	
University of Western Australia	500	68	312,113	211,027	196,255	62.9%	14,884	0	14,884	1,289	1,802	3,091	21.0	13.2		
University of Adelaide	450	63	240,049	170,356	158,431	66.0%	11,357	3570	14,927	746	970	1,716	21.1	14.0	28.8	
Macquarie University	500	56	201,203	147,647	137,312	68.2%	19,630	1168	20,798	870	896	1,766	10.2	7.0	40.0	16.4
QUT	200	53	326,291	192,368	178,902	54.8%	26,515	1722	28,237	1,562	2,139	3,701	12.3	6.7		75.0
University of Wollongong	350	52	180,948	127,717	118,777	65.6%	12,725	0	12,725	801	788	1,589	14.2	9.3	35.0	43.8
La Trobe University	550	52	312,227	214,987	199,938	64.0%	15,202	2758	17,960	1,299	1,361	2,660	20.5	13.2		123.7
University of Newcastle	350	51	260,404	153,681	142,923	54.9%	16,191	346	16,537	771	1,146	1,917	16.1	8.8		
University of Tasmania	200	50	241,893	164,965	153,417	63.4%	11,796	430	12,226	793	1,012	1,805	20.5	13.0		45.0
Griffith University	450	50	300,949	220,739	205,287	68.2%	26,430	240	26,670	1,162	1,993	3,155	11.4	7.8		
University of Technology, Sydney	450	49	267,161	158,343	147,259	55.1%	20,875	566	21,441	1,174	1,352	2,526	12.8	7.1		
Curtin University	350	48	221,446	137,738	128,096	57.8%	19,818	1398	21,216	1,305	1,288	2,593	11.2	6.5		20.5
Flinders University	350	48	170,757	115,261	107,193	62.8%	10,303	579.0	10,882	667	958	1,625	16.6	10.4		
Murdoch University	350	47	119,606	80,314	74,692	62.4%	8,031	1360	9,391	500	767	1,267	14.9	9.3		
RMIT	450	46	428,936	254,877	237,036	55.3%	27,719	6451	34,170	1,619	1,693	3,312	15.5	8.6	28.6	
University of South Australia	350	46	250,782	155,175	144,313	57.5%	16,303	2750	19,053	1,010	1,256	2,266	15.4	8.9	40.0	
Deakin University (all campuses)	350	45	261,640	163,353	151,918	58.1%	18,159	4,602	22,761	951	1,287	2,238	14.4	8.4		
University of New England	150	45	137,627	98,046	91,183	66.3%	2,720	5873	8,593	465	671	1,136	50.6	33.5		
University of Western Sydney	300	44	344,815	211,364	196,569	57.0%	23,299	452	23,751	1,176	1,222	2,398	14.8	8.4		40.0
James Cook University	125	44	147,515	106,948	99,462	67.4%	8,953	507	9,460	729	891	1,620	16.5	11.1		
Swinburne University of Technology	250	43	197,795	150,802	140,246	70.9%	19,247	5335	24,582	1,280	759	2,039	10.3	7.3		
Southern Cross University	250	41	61,935	45,744	42,542	68.7%	3,000	2637	5,637	269	470	739	20.6	14.2		
University of Canberra	200	41			60,272	72,449			9,500					6.3		
Victoria University	150	41	251,697	187,951	174,794	69.4%	23,807	2731	26,538	1,391	1,260	2,651	10.6	7.3		
Australian Catholic University	200	40	33,527	26,002	24,182	72.1%	3,272	491	3,763	206	135	341	10.2	7.4		
Charles Sturt University	200	40	172,664	128,664	119,658	69.3%	6,908	6642	13,550	684	1,139	1,823	25.0	17.3		34.0
University of Southern Queensland	250	38	97,991	78,395	72,907	74.4%	3,370	5511	8,881	516	804	1,320	29.1	21.6		
University of Ballarat	200	38	49,900	34,700	32,271	64.7%	8,466	868	9,334	283	459	742	5.9	3.8		58.1
University of the Sunshine Coast	250	38	43,469	28,880	26,858	61.8%	3,873	258	4,131	144	280	424	11.2	6.9		
Edith Cowan University	350	37	183,326	111,660	103,844	56.6%	12,722	875	13,597	516	889	1,405	14.4	8.2		
Charles Darwin University	150	30			*NO DATA*											
Central Queensland University	150	30	114,381	75,795	70,489	61.6%	2,949	3767	6,716	473	830	1,303	38.8	23.9		
Bond University			48,508	23,769	22,105	45.6%	4,283	0	4,283	232	420	652	11.3	5.2		
Boxhill TAFE			49,575	35,950	33,434	67.4%	19,000	7500	26,500	492	416	908	2.6	1.8		
Average				174,184	159,314									11.4		
												2007 Australia Benchmark		14.4		



Where do we learn?

8 Universities & Schools - UQ, QUT, VU, Griffiths, University of Melbourne, UWS, UTS, Northern Beaches

400+ images, http://bit.ly/cauditls

Themes - Consumerisation of technology, window of wow, spaces as agents for change, desire paths

FIT SPACES

F – ***Flexibility*** (reconfigurable spaces that promote student's desire paths. However, include anchor points to avoid creating a soulless space without structure. Some solid pieces provide structure and interest to the area)
I – ***IT*** (Students may bring their own, but often some presentation technology will be needed)
T – ***Table*** (at an appropriate height)

S – ***Safe*** (for 24/7 access)
P – ***Power*** (for their own devices)
A – ***Accessibility*** (ensure people with disabilities can make good use of the spaces)
C – ***Comfort*** (personalised – this may mean a cosy private spot, a beanbag or a chair and desk)
E – ***Eat*** (Students want to eat and drink in these spaces, include kitchenettes, a microwave, hot water and vending machines for 24/7 access)
S - ***Surfaces*** to write on

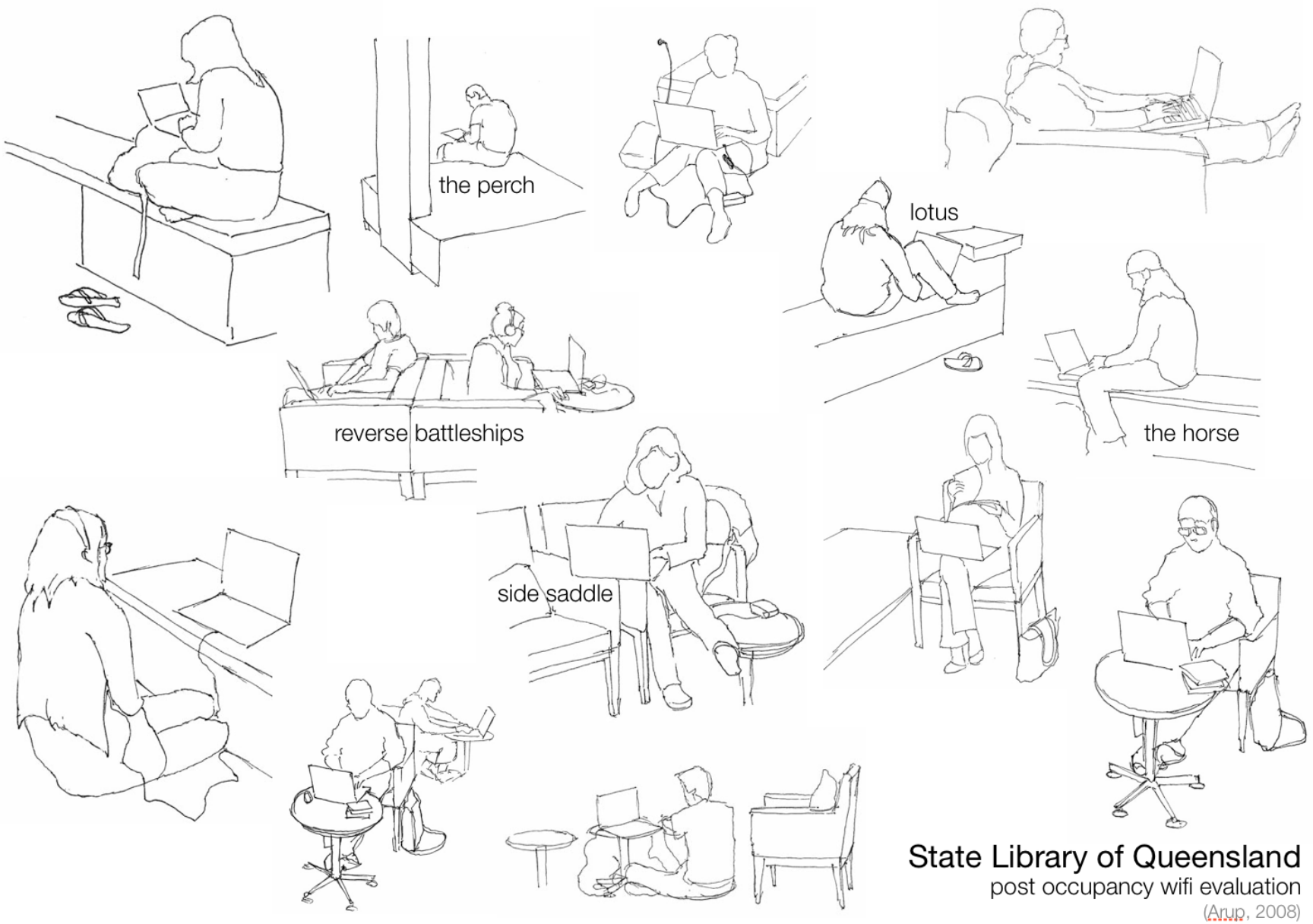
How do we evaluate?
literature

- "Performance measures are often associated with the practice of post occupancy" evaluations" (Lackney, 2001).
- Need for both pre-design and post occupancy evaluations (Lee, Tan & Tout, 2011).
- "insufficient qualitative/deep research on the relationship between pedagogy and design of learning environments" (Fisher, 2005).
- Classrooms *were* the focus of learning in higher education (Brown, 2005).
- The impact of different learning spaces is not easy to explore independently of the learning techniques, teacher style, information systems employed and many other factors. (SFC, 2006).
- Heppell et al. (2004) argue that ‘no one knows how to prevent ‘learning-loss’ when you design a space ‘pedagogically’, whereas we know lots about designing for minimum ‘heat loss’. (The Department of Education and Early Childhood Development, 2011).

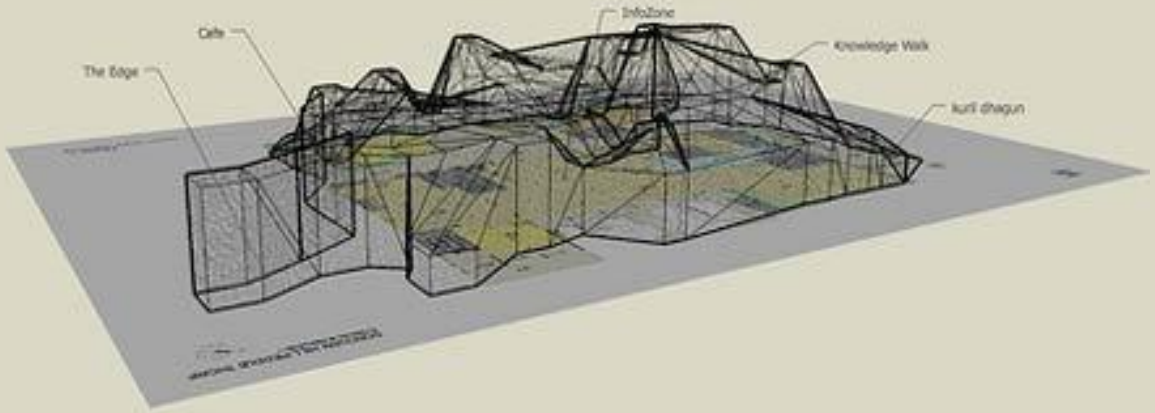
Strategies for evaluating

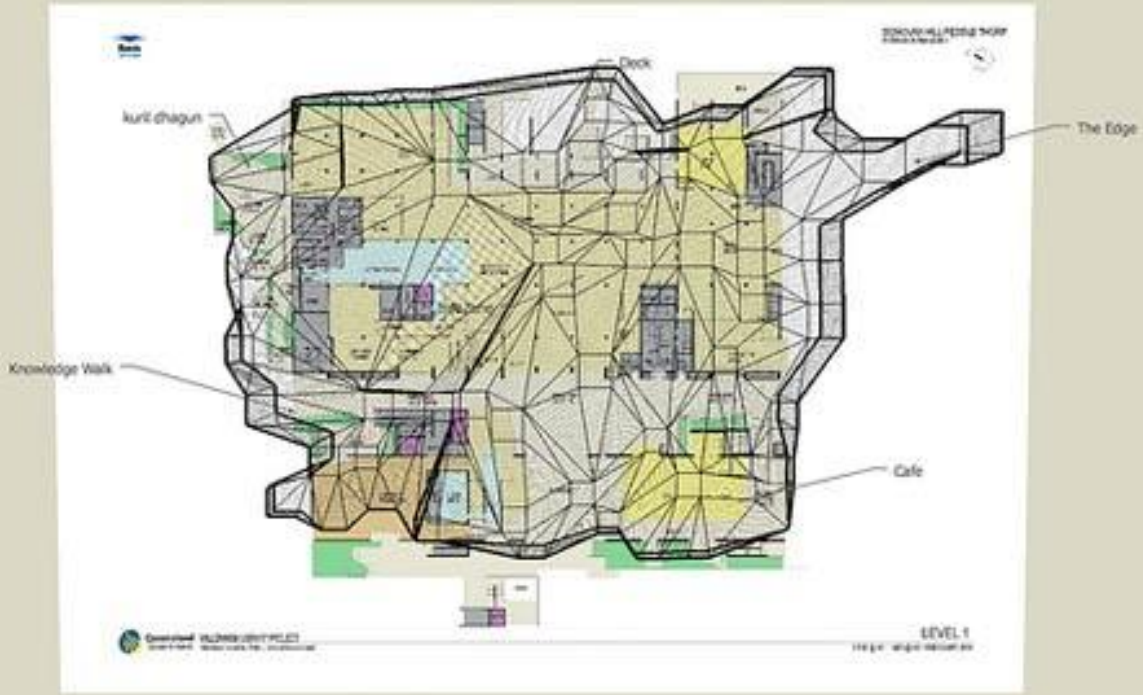
- wide array of strategies beyond surveys
- different perspectives provide different insights
- http://www.swinburne.edu.au/spl/learningspacesproject/database/index.html

the design of furniture across the Infozone was intended to break up the traditional anthropomorphic relationship between the user and their laptop. (Hill, 2008)



State Library of Queensland
post occupancy wifi evaluation
(Arup, 2008)





State Library of Queensland
Post-occupancy evaluation
(ARUP, 2008)

how the variability of wi-fi maps onto the informal use of space enabled by the Library's open design


The city is filled with
an invisible landscape
of networks

ACTIVITY TWO

How do we evaluate learning spaces? Identify space attributes and impact

Time Needed
20 minutes

Step 1
Discovery

Identify attributes: 10 minutes

Choose two of your previous learning locations and identify their attributes.
Think about the space from the perspective of the user, what might support or impede their learning?
List the attributes below... (eg. capacity of wifi, availability of coffee...)
TIP: Choose a location from each end of the spectrum!

1) location:

attributes:

2) location:

attributes:

Step 2
Ideation

Measure impact: 5 minutes

Looking at the attributes you have identifued. Discuss how you would measure them and their impact on learning?

TIP: Think about the physical and immaterial attributes.

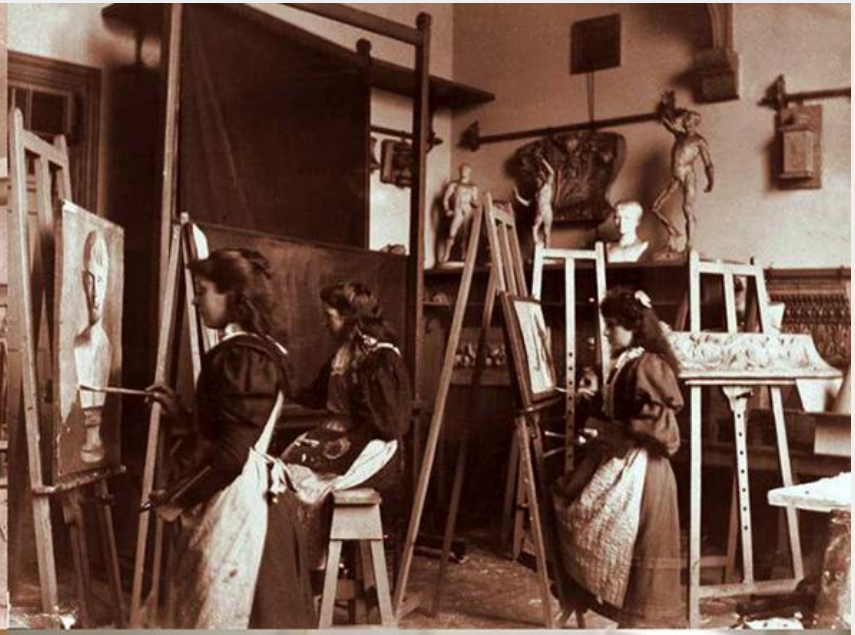
notes...

Step 3
Feedback

Feedback: 5 minutes

Time to share with the group. Tell us about one of your locations, its attributes, impacts on student learning and how you would measure this?

Designs for the future



ACTIVITY THREE

Designs for the future
Looking forward five years or more...

Time Needed
20 minutes

Step 1
Ideation

Brainstorm: 10 minutes

What do our evaluations tell us about the kind of future learning spaces we should be considering? What are the implications for teacher practice?

Now's your chance to imagine new solutions. In your groups sketch 6-8 radical ways that learning spaces might change in the next 5 or more years.

Don't worry about being perfect, draw your ideas quickly to capture them. Use more paper if you need!

ACTIVITY THREE

Designs for the future
Looking forward five years or more...

Step 2
Prototype

One BIG idea: 10 minutes

From your brainstorming/discussions... Choose one idea that has great potential and scale it up.
This is your chance to pitch the future learning spaces!