

Flexible learning and Learning Spaces. How flexible can you get?



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1



2

A PDF copy of this presentation is available from:

<http://petermellow.com/>

3

Why do I teach?



4

Wednesday, 30 June 2010

Think - Pair - Square

Why do I
teach?

00:07:03

5

Students

Help people achieve their
dreams

I was born to teach

It's what I do

I Enjoy
teaching

Contribute

Make a better world

Job

Provide for family

Money

Better than
working
for a living!

6

PBRF

PBTF

PBLF

7



8

Wednesday, 30 June 2010



The Essence of Good Teaching

What makes a great learning environment?

October 2, 2008

- Introduction
- Vision
- Methods/Ethics
- Student's views
- NZ Tertiary
- NZ ADEs
- Resources
- Quotes
- Links
- Contact

Welcome to the Essence of Good Teaching

Wouldn't it be great if you could bottle good teaching practice and take a drink before you had to face a class? Unfortunately good teaching can't be extracted into an elixir. So who should we ask to find out what we can do to be better teachers/educators/communicators?

We could ask the learners! The students we teach are very smart and can tell a great teacher from a good teacher. However, they may not be able to clearly identify why one teacher is better. I think the student perspective is important, and this may form part of a later stage in this project.

The **Essence of Good Teaching** project is about showcasing video interviews with great teachers who have reflected on their teaching practice and make these insights available here for other educators to watch, take on board, and hopefully apply if they feel it is relevant to them.

"Teaching is much, much more than a quantifiable list of actions and behaviors"

Karl Dodds (2006), Maths, Physics & Computing, Christchurch Polytechnic Institute of Technology - PRIME MINISTERS SUPREME AWARD Tertiary Teaching Excellence Awards 2006



9

Why do I teach?



AKO AOTEAROA academy
OF TERTIARY TEACHING EXCELLENCE

Adrian Woodhouse
Senior Lecturer, Otago Polytechnic

10

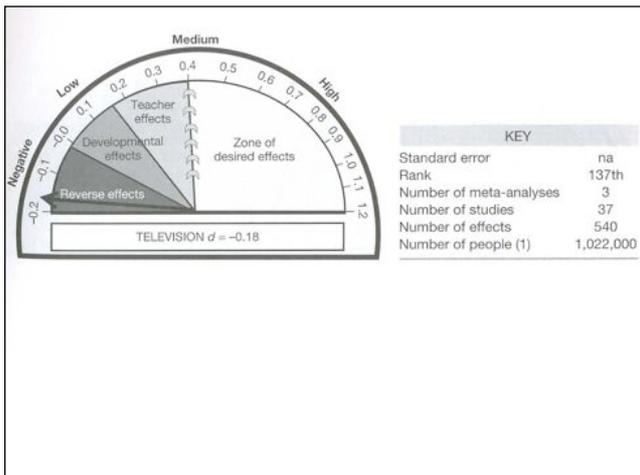
Visible Learning

A synthesis of over 800 meta-analyses relating to achievement



John Hattie

11



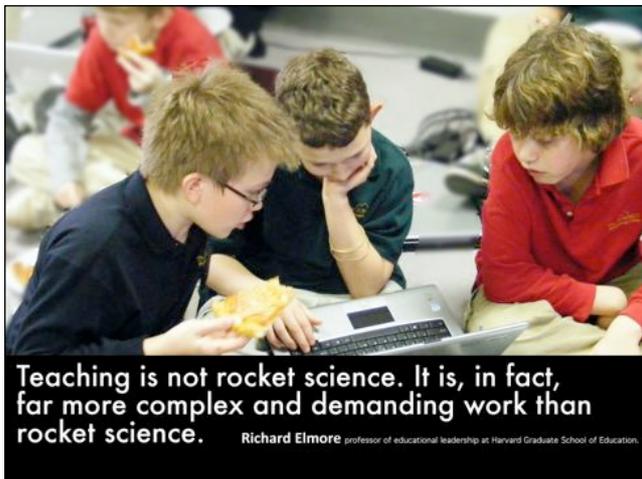
12

Rank	High	Low
1	Self-concept	39 Peer tutoring
2	Providing formative evaluation	37 Cooperative vs. competitive
3	Microteaching	36 Birth rights
4	Accommodation	35 Classroom cohesion
5	Teacher efficacy	40 Keller's PSI -personalized system of instr
6	Comprehensive interventions for learning	41 Peer influences
7	Reciprocal teaching	42 Classroom management
8	Feedback	43 Outdoor education
9	Teacher-student relationships	44 Interactive video methods
10	Spaced vs. massed practice	45 Parents' involvement
11	Meta-cognitive strategies	46 Early programs
12	Peer achievement	47 Second & third chance programs
13	Verbal ability	48 Small group learning
14	Repetitive reading programs	49 Persistence
15	Creativity programs	49 Engagement
16	Self-organization & self-questioning	51 Concentration
17	Professional development	52 Early interventions
18	Problem-solving teaching	53 Questioning
19	Labeling students	54 Remedial programs
20	Phonics instruction	55 Preschool programs
21	Teaching strategies	56 Quality of teaching
22	Cooperative vs. individualistic	57 Writing programs
23	Direct instruction	58 Teacher expectations
24	Direct instruction	59 School size (800 vs. ma-1 high school)
25	Active instruction programs	60 Motivation
26	Comprehension programs	61 Behavior/advance organizers
27	Mastery learning	62 Teaching style of learning
28	Worked examples	63 Cooperative learning
29	Home environment	64 Science programs
30	Socioeconomic status	65 Social skills programs
31	Concept mapping	66 Reducing Anxiety
32	Goals	
33	Visual perception programs	

13

Rank	High	Low	
1	Self-concept	39 Peer tutoring	Student
2	Providing formative evaluation	37 Cooperative vs. competitive	Home
3	Microteaching	36 Birth rights	School
4	Accommodation	35 Classroom cohesion	Teacher
5	Teacher efficacy	40 Keller's PSI -personalized system of instr	Curricula
6	Comprehensive interventions for learning	41 Peer influences	teaching approaches
7	Reciprocal teaching	42 Classroom management	
8	Feedback	43 Outdoor education	
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31	Concept mapping	66 Reducing Anxiety	
32	Goals		
33	Visual perception programs		

14



15

Mix-Think-Pair-Square

Come up with two situations:

- 1- What is one characteristic of a good teacher you had in the past?
- 2- What is one characteristic of a NOT so good teacher you had in the past?

00 : 06 : 10

16

Qualities of a good teacher?



17

What leads to Success?



18

What Good Teachers Say About Teaching - Berkeley

- The teacher's main task is to guide students through the learning process, not to dispense information
- The goal of teaching is to help students read, speak, write, and think critically
- Learning is a "messy" process, and the search for truth and knowledge is open-ended
- Good teachers love their subject matter
- Good research and good teaching go hand in hand

19

- The best teachers genuinely respect students and their intellectual capabilities
- Good teachers are rarely satisfied with their teaching. They constantly evaluate and modify what they do
- Good teachers usually had good teachers, and they see themselves as passing on their own teachers' gifts to a new generation of students
- Good teachers treasure the small moments of discovery in the classroom and the more enduring effect they have on students' lives
- Good teachers do not see teaching as separate from other activities

What Good Teachers Say About Teaching - Berkeley

20

"The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires."

William Arthur Ward

"I like a teacher who gives you something to take home to think about besides homework."

Lily Tomlin as 'Edith Ann'

"If a student can't learn the way we teach, maybe we should teach the way they learn."

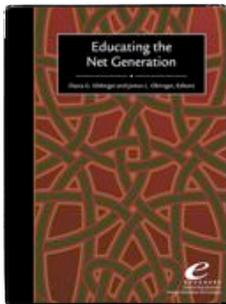
Ignacio Estrada

21

Our Students



22



Available as a free
PDF download from:
www.educause.edu



Diana Oblinger
President of Educause

23

Students



24



Teachers

25



26

Digital Literacy



27

Technology Support

- “Current generation of students expects seamless technology use.”
Brown, Oblinger. (2005)

“Many teachers steer clear of engaging with technology - they leave it to the technologists and get on with the business of teaching. This is no longer an acceptable position, however.

Teachers must reach a point where they are exploiting the full benefits of technology to support their learners.”

Good, M. On the way to online pedagogy. (2001)

28

Massey (2000) and Blandin (1997) see four levels of skill:

Level 1: Competent in a few tools that are used in everyday working, for example word processing.

Level 2: Competent in a wider range of everyday tools to a higher level - able to use advanced word processing features to enhance productivity; able to log on to and use a conference area; still a victim of many of the problems that will happen and dependent on others to solve them.

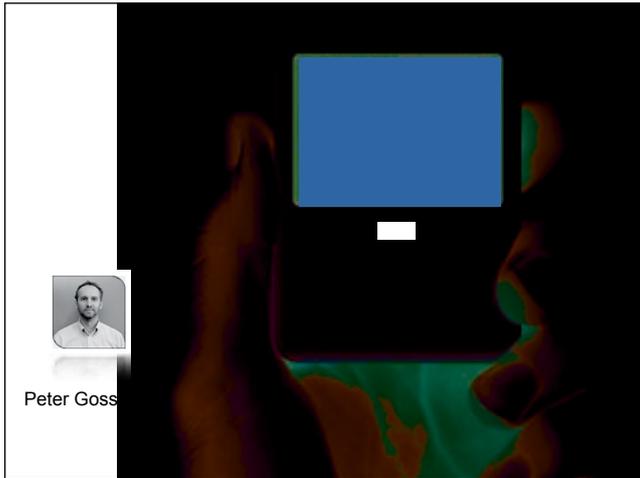
Level 3: Autonomous explorer - engaged with technology and able to solve own problems and look out for new opportunities as things change and develop.

Level 4: Expert.

“Many teachers are at levels 1 and 2. They all need to be at level 3 and far more need to combine subject expertise with deep knowledge of the technology to become **educational technologists** or **technological educators**.”

Good, M. (2001). On the way to online pedagogy.

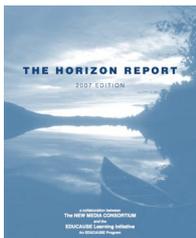
29



30

<http://connect.educause.edu/Library/ELI/2008HorizonReport/45926>

What's coming up in the next few years?



31



32

Then Now When?

Blackboard Learning Management System (LMS) - **AUTonline**

AUTonline
 Blogs
 Wikis
 Podcasting - AV
 ePortfolio
 CMS
 Wimba
 Scholar
 Skype/iChatAV
 Media Streaming Server

3D AV
 Twitter
 Educational Gaming
 Virtual Worlds
 Remote instrumentation
 Augmented reality
 Mapping mashups
 Data visualisation
 Digital & convenient
 Peer production
 Control & authority
 Learning spaces
 Changing mental models

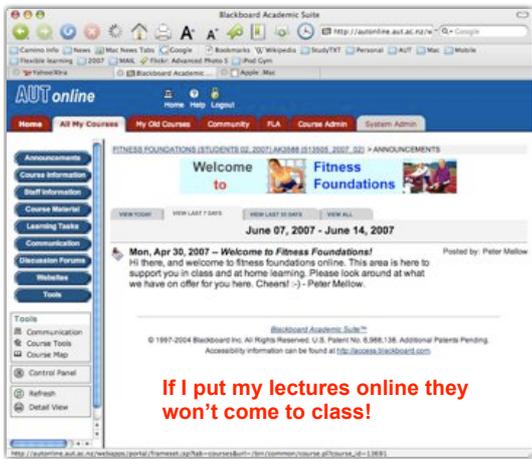
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“The proliferation of learning management systems suggests that no one system is sufficiently feature rich, or adequately flexible and extensible enough to meet everyone’s needs or even most institutions’ requirements.”

Ira Fuchs, vice president for research in information technology, Mellon Foundation.

Fuchs, I. (2004, July) Learning Management Systems: Are we there yet?

34



35

“Most human learning is incidental and happens outside designated educational settings.”

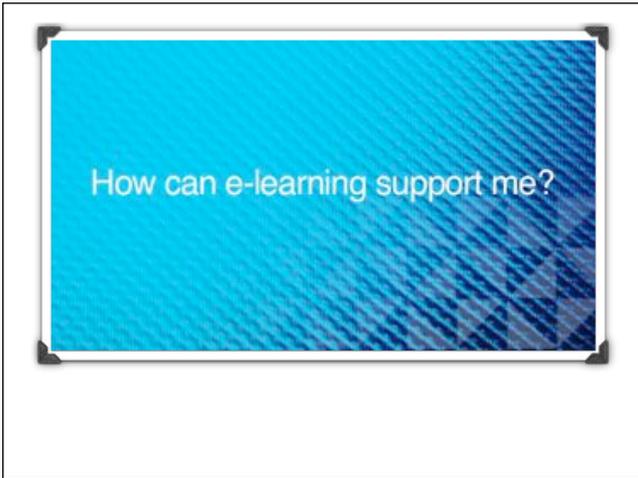
Jared Still – Year 13 student at Tauraroa Area School near Whangarei. The College Herald 30/8/05



36



37



38

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Staff & Student eLearning survey

Students would like:

- more opportunities for feedback on their learning Formative quizzes
- to be able to work in more active ways Wikis, blogs, presentations, projects
- to have opportunities to create & collaborate Team work, wikis, presentations, projects
- to have more engaging material Podcasts, multimedia, interactivity

39

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Staff & Student eLearning survey

<p>Tools used by Students</p> <ul style="list-style-type: none"> ✓ Lecture notes 70% ✓ Announcements 67% ✓ Tutor contact details 67% ✓ Discussion forums 62% 		<p>Tools Students would like to use</p> <ul style="list-style-type: none"> • Quizzes 50% • Video 50% • Self assessment & feedback 47% • Tutor feedback 46% • Audio 41% • Opportunities to revisit work covered in lecturers and seminars 40%
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40

1903 **2008**

“The teaching of typing was hindered by the lack of typewriters” George George, Director of Auckland Technical School 1902-1922

41

How do our students work?

42

Students create content

Squires (1999) describes these video based labs as facilitating a constructivist learning environment. They promote open ended exploration in an authentic learning environment; particularly when the learner chooses and captures their own film clips.

Squires, D. (1999). Educational software for constructivist learning environments: Subversive use and volatile design.

43

“What I observed as part of collaborative school culture were teachers who:

1. **engage in frequent, continuous, and increasingly concrete and precise talk about teaching practices** (as opposed to simply gossiping about other teachers, administrators, and students):
2. are frequently observed and provided with useful feedback on their teaching
3. **plan, design, research, evaluate, and prepare teaching materials together;** and
4. teach each other the practice of teaching.”

Little, J.W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. American Educational Research Journal.

44



Drury University

"Within my lifetime, refusal by a faculty member to use distance-learning technology will be considered professional malpractice."

Dr. Chris Dede
Professor of Learning
Technologies
Harvard University

Quoted in the Chronicle of
Higher Education, Oct. 14, '99.

45

More Multi-media

- Many lecturers wish to use a variety of media types in their teaching



Infrastructure

- Hardware
- Software
- Bandwidth/storage
- Skills/Abilities

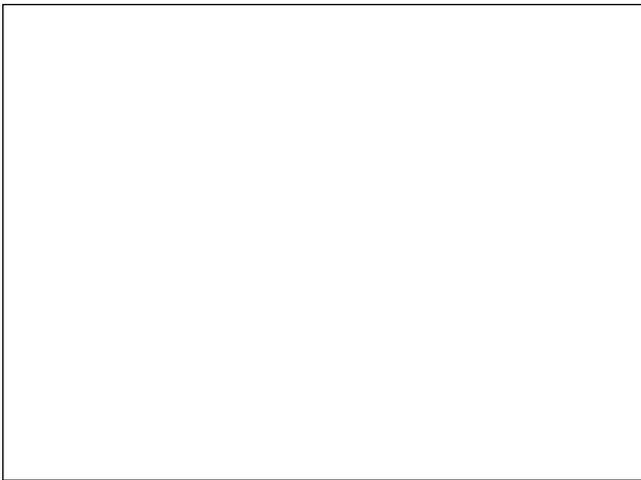
46

What do we need to do?

47



48



49

“Overall, the largest benefit gained by technology has been the ability to get the information to students on their terms”.

What guides educational development: pedagogy or technology?
Palmer & Devitt 2005 - AUC conference

“...but it is observed that students will often embrace the use of technology in their learning even if it is only for the novelty value of such interventions.”



50



Korero Pt England




51



52

iTunesU - Podcasting



53



54



55

“...whether we like it or not,

whether we are ready for it or not,

Mobile learning represents the next step in a long tradition of technology-mediated learning.”

Ellen D. Wagner, Educause Review vol 40, no. 3 May/June 2005 pp. 40-53

56

Australian undergraduates' use and ownership of emerging technologies: Implications and opportunities for creating engaging learning experiences for the Net Generation

Beverley Oliver and Veronica Goerke
[Curtin University of Technology](#)

Studies and commentary from the United States suggest that current undergraduates, part of the so called Net Generation, are high end users of emerging technologies such as mobile devices and new communication tools. This paper reports results from an Australian study of first year undergraduates which confirms these assertions: ownership of laptops, mobile phones and music devices appears to be growing rapidly among this group, along with their use of tools such as instant messaging, blogs and podcasts. Discussion of these results include suggestions as to how teachers of first year undergraduates can incorporate these tools and devices into extramural learning experiences in order to increase engagement and exploit the Net Generation's desire for 'connectedness'.

Introduction

Undergraduates' "digital backpacks" are likely to hold all manner of convergent mobile devices and tools (Millea, Green, & Putland, 2005) designed to keep the multi-tasking Net Generation connected and 'always on' (Oblinger & Oblinger, 2005). The contents of these students' "digital backpacks" are interesting not just in themselves, but because of what they indicate about their owners' electronic habitats and the activities they find potentially engaging. Oblinger and Oblinger, drawing on studies in the United States, claim that today's Net Generation (born between 1982 and 1991, making them currently between about 14 and 23 years of age) began using computers between the ages of 5 and 8; in their teenage years, they used the Web extensively for school research (Oblinger & Oblinger, 2005). Convenience, connection and control are claimed to be the factors driving the Net Generation's take up

57

Table 3: Off campus access to the Internet

Off campus access	2005	2007
	Do you have access to the Internet outside University?	Will you have access to the Internet outside University this semester?
No	21 (5.1%)	11 (3.8%)
Yes	389 (94.4%)	265 (91.4%)
Not sure	2 (0.5%)	14 (4.8%)

Table 4: Use of the Web for learning

Web resources for learning	2005	2007
	Do you frequently use online resources to help your learning?	Do you frequently use online resources for study purposes?
No	14 (3.4%)	23 (7.9%)
Yes	383 (93.4%)	251 (86.6%)
Not sure	13 (3.2%)	16 (5.5%)

58

Table 5: Number and percentage of students who reported owning devices

	Year	n	No	Yes	Not sure
Laptop	2005	412	51.9%	47.6%	0.5%
	2007	290	50.0%	48.6%	1.4%
Handheld computer	2005	409	91.0%	8.1%	1.0%
	2007	288	93.1%	5.6%	1.4%
Mobile phone	2005	412	2.2%	97.6%	0.2%
	2007	289	3.1%	96.2%	0.7%
iPod or MP3	2005	409	59.2%	40.6%	0.2%
	2007	288	28.5%	70.1%	1.4%

59

Does it work?



Evaluation of Evidence-Based Practices in Online Learning
A Meta-Analysis and Review of Online Learning Studies

- "...contrasting blends of online and face-to-face instruction with conventional face-to-face classes, blended instruction has been more effective..."
- "Even when used by itself, online learning appears to offer a modest advantage over conventional classroom instruction."



60



“The meta-analysis found that, on average, students in online learning conditions performed better than those receiving face-to-face instruction.”

May 09



61

PLE - Personal Learning Environments



62

"It is virtually impossible to engage students in purposeful and meaningful inquiry without the Internet and communication technologies to precipitate and sustain discourse that is central to higher order learning. Well-designed blended learning can be a much more engaged and meaningful learning experience than sitting passively in a lecture hall."

- Dr. Randy Garrison and Norman Vaughan, academics authors of "Blended Learning in Higher Education: Framework, Principles, and Guidelines"

63



64



65



66

Think - Pair - Share

Come up with two words:

- 1- What is ONE environment we learn in?
- 2- What activity happens in that environment?



A digital timer showing 00:07:30 in green digits on a black background.

67

“Spaces are themselves agents for change. Changed spaces will change practice.”
JISC - Designing Spaces for Effective Learning

- Built in pedagogy
- “We spend a lot of time trying to change people. The thing to do is to change the environment and people will change themselves.”
Les Watson, pro vice-chancellor, Glasgow Caledonian University. (2006)



A book cover titled "Learning Spaces" with a blue and orange pattern.

68

LETTING IN THE LIGHT

Early rural Taranaki schools were often built by the local community, and most were very basic. One of the most influential architects of educational buildings was Charles H. Moore, who was appointed to the Taranaki Education Board in 1920.

In 1927, the first of Moore's "open-air" classrooms was erected at the Infant Department of New Plymouth's Central School. This innovative design featured low windows allowing lots of light into the rooms, and providing students with a view. He also introduced the use of concrete and brick in schools.

Moore's design spread throughout Taranaki and is still seen in schools throughout the province. Moore retired in 1943 after the most intensive educational building programme seen in the province for many years.



69

Large Lectures: *scary stuff*

- Students not attentive 40% of the time
- Students retain 70% of first 10 minutes, but ...
- Attention decreases with each passing minute until last 10 minutes
- Students retain 20% of last 10 minutes

McKeachie (1980)

70

The "compact of disengagement"

- "You leave me alone and I will leave you alone"
- "No one knows I'm here", so...
 - little sense of responsibility or accountability
 - irregular attendance

Kuh, Schuh and Whitt (1991)



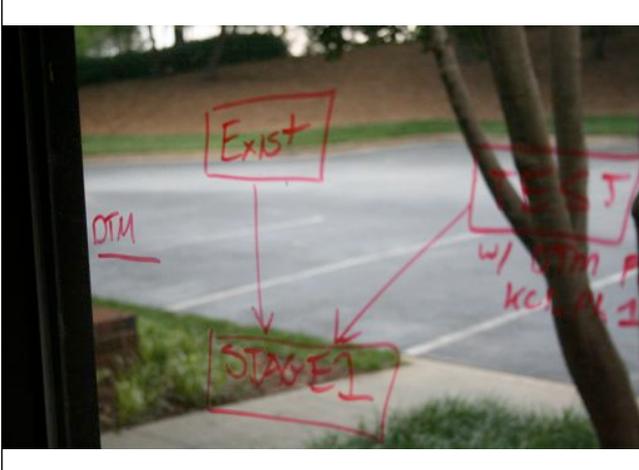
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72



73



74

Think spots



75

Marker Boards, Wireless Access, and Technology



76

“Open Teaching - Thinning the walls”

TIME →



Conceptualization of the process of “thinning the walls” of a classroom, course, or other formalized educational experience. Ideally, students gain required skills, requisite knowledge, self-efficacy, and develop their own personal learning network (PLN). Instructors guide the process using their own PLNs, through a variety of teaching/learning experiences, and (distributed) scaffolding.

The interactions between students here represent the notion of the gift economy. There are likely better ways to represent this type of interaction and student knowledge.

77



78

LeBaron Hall - Iowa State

- “The best thing it does for my students is create community in the classroom - I can see all the students, and I can get them interacting easily.”
Lecturer
- “It is my favorite classroom on campus. I feel close to the instructor and ready to learn.”
Student
- “No matter where I sat in the room, I feel closely connected with the instructor.” *Student*

79

Decenteredness

- “The single focal point at the front of the room sends a strong signal about how learning will occur.”
- “Within the classroom it means avoiding the message that the room has a front or a “privileged” space.”

Nancy Van Note Chism (2006)

80

80

Outside the classroom, it means providing ubiquitous places for discussion and study.

It means that the flow of spaces—from library to faculty or administrative offices to classrooms and the corridors and outdoor passageways in between—must be rethought in terms of learning.

Spaces should centre on learning, not experts.

Nancy Van Note Chism (2006)

81



82

Creating interaction opportunities

- Think-pair-share *Lyman (1981)*
- Think-pair square
- Written tasks
 - Summarise
 - Key Questions

Slide provided by Sue Shaw, AUT

83

Try an Interactive Lecture Structure

- Give all of the students something to do (apart from writing down notes!)
- Solve problems together
- The Thiagi group have 36 interactive lecture ideas at:
 - <http://www.thiagi.com/interactive-lectures.html>

84

84

Movement

- Avoid being too static
- Use audio technology to allow you to 'roam the room'
- "The only piece of immovable furniture in the lecture theatre should be the lectern and not you!" *Koh & Wang, Centre for Development of Teaching and Learning, National University of Singapore (2000)*

85

Seating layout...

and guerrilla architecture!

86

Let's Share!

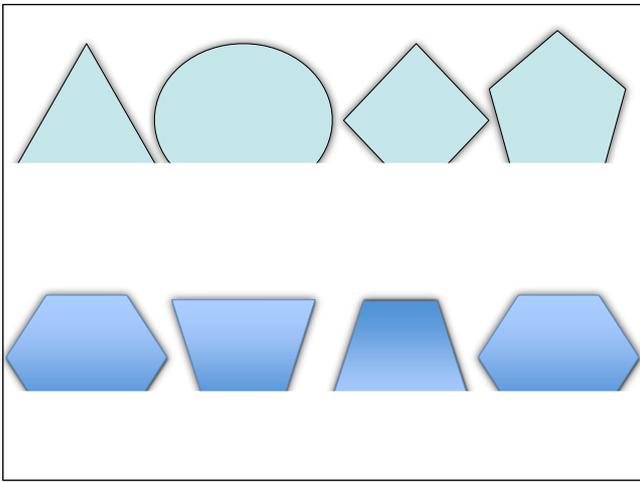
- Divide into smaller groups (4-6?)
- Share a story each of a 'different' classroom layout that you found effective in context (**7 minutes**) - note common qualities, record key points
- Feedback and share with the whole 'class'

00:07:03

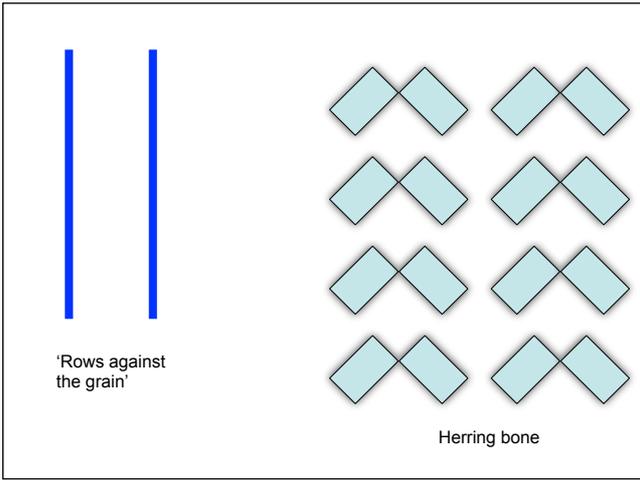
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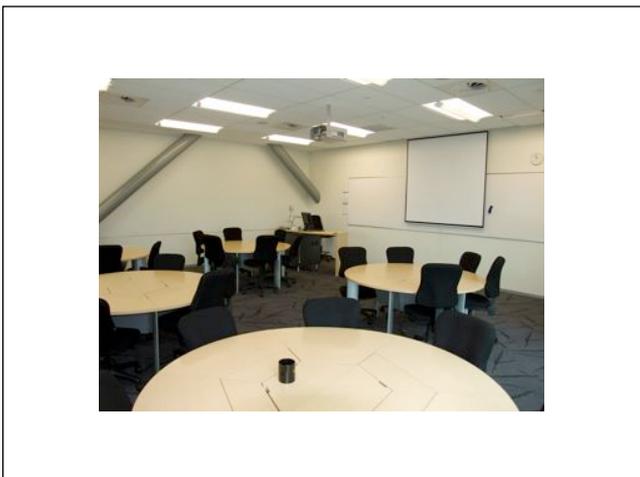
89



90



91



92

“Your primary influence is the environment you create.”



Peter Senge

American scientist and director of the Centre for Organizational Learning at the MIT Sloan School of Management.

93

Can kids teach themselves? - TED.com

Sugata Mitra,
Professor of Educational Technology at the School of Education, Communication and Language Sciences at Newcastle University, UK

Minimally Invasive Education (MIE)

Hole in the wall (HIW) computer research and projects



Mitra, S., Ritu D., Shiffon C., Swati J., Ravinder S. B., and Preeti Kapur. (2005). Acquisition of Computer Literacy on Shared Public Computers: Children and the "Hole in the wall", *Australasian Journal of Educational Technology*, 21(3), 407-426.

94

"If we continue to teach our students today, as we taught them yesterday, we rob them of tomorrow."

John Dewey



95