

Opportunities or Traps

How can online learning activities enhance learning in the clinical environment?



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**CHANGE
YOUR
WORLD.**

~~Wake~~ Warm up activity 1

- **Clinical environment**
- **One instance that impacted you**
- **List words that describe this experience**
- **Why was it effective?**
- **Discuss this with person nearby**



Effective clinical learning environment



- **participation:**
observation → acting → performance
- **supportive environment**
- **sense of identity, confidence (affective component)**
- **feedback timely and appropriate**
- **organisation and planning of experience**

~~Wake~~ Warm up activity 2!

- Example of a lost opportunity
- Why did this happen?
- What was missing?
- Discuss this with person nearby

Common problems

- **unsystematic, unplanned**
- **time pressures**
- **wrong level**
- **power differentials emotional factors**
- **no feedback**
- **lack of direction**
- **learner lacks self monitoring skills**



Dornan 2005, Wozniak 2007

Outcomes from session:

- **Identify important factors for effective elearning**
- **Avoid the traps**
- **Introduce frameworks that helped me to make informed choices about elearning**
- **Maximise your opportunities**

My Journey

- 1980's **Orthoptist**
 - » Rural NSW Ophthalmology practice
 - » Hospital Prof Fred Hollows—student supervisor
- 1990's **Orthoptist / Clinical coordinator / Lecturer in Ophthalmology at Syd Uni**
- 2000 **Started to use online learning activities**
- 2004 **Project Manager elearning projects for the 5 health faculties - Uni Syd**
- 2006 **Medical faculty- clinical education across 7 clinical schools Uni Syd**
- 2007 **Manager education development - CDU**

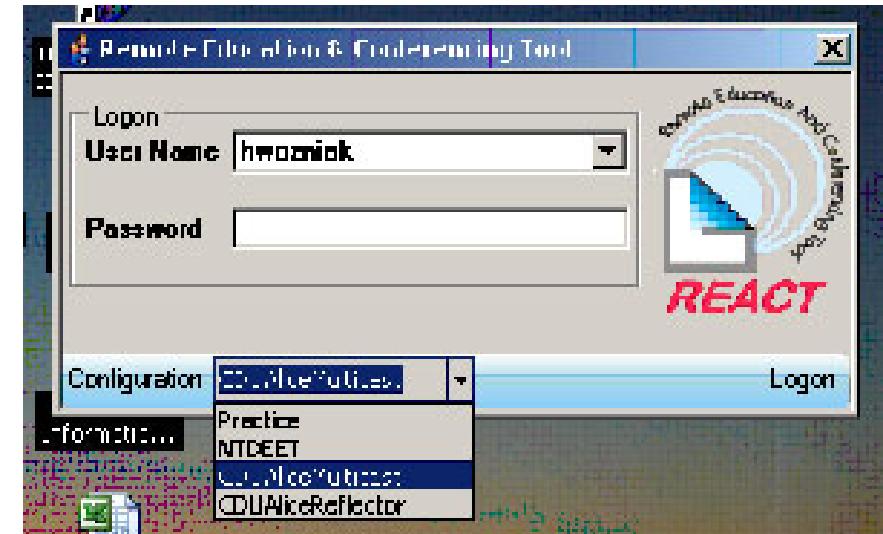


~~Wake~~

Warm up activity 3:

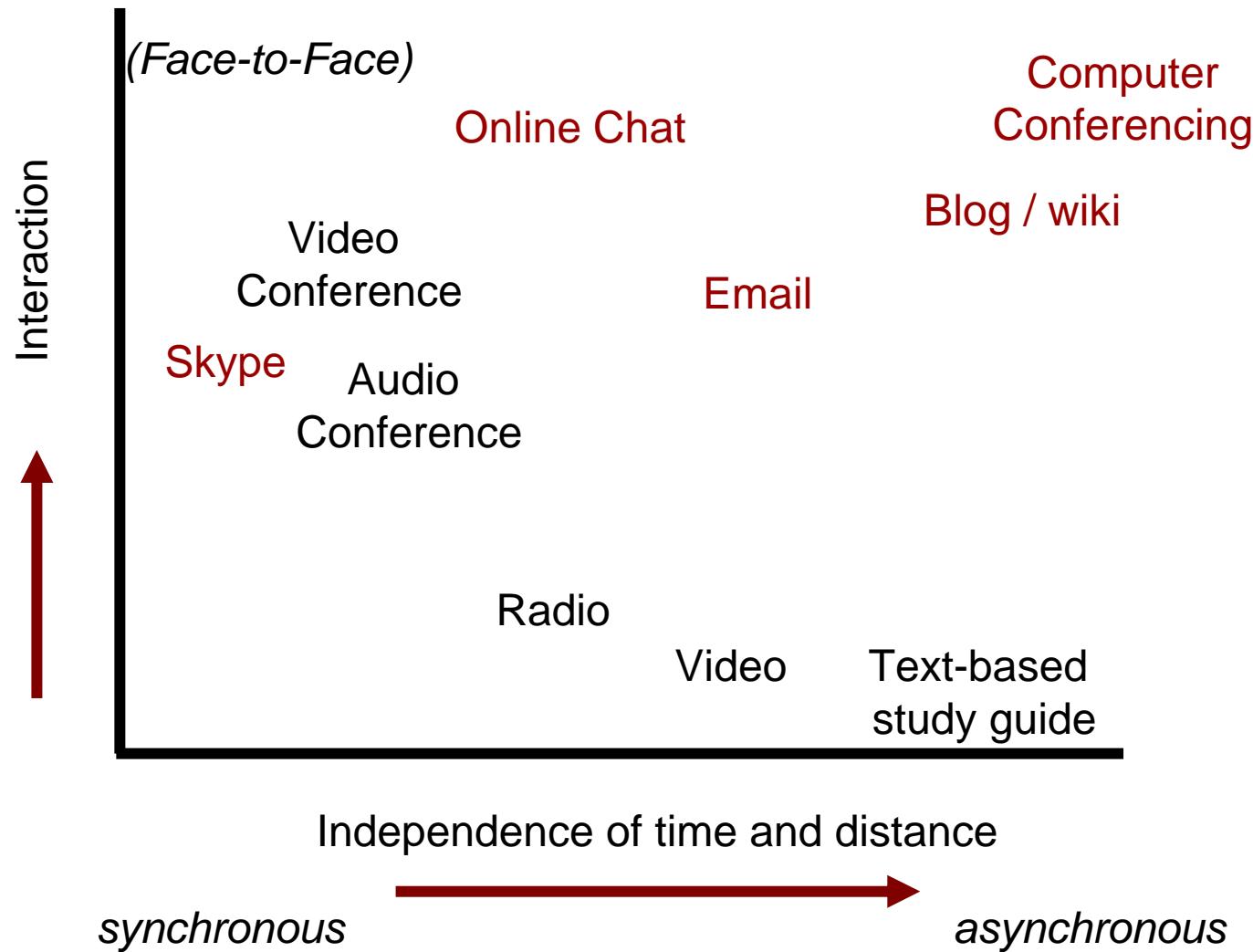
- Your context
- Currently use technology with your trainees?
- Involved in designing online activities





Education media

From Garrison & Anderson, 2003



Trap 1

**Focusing on
technology**

**Not considering the
learning process**



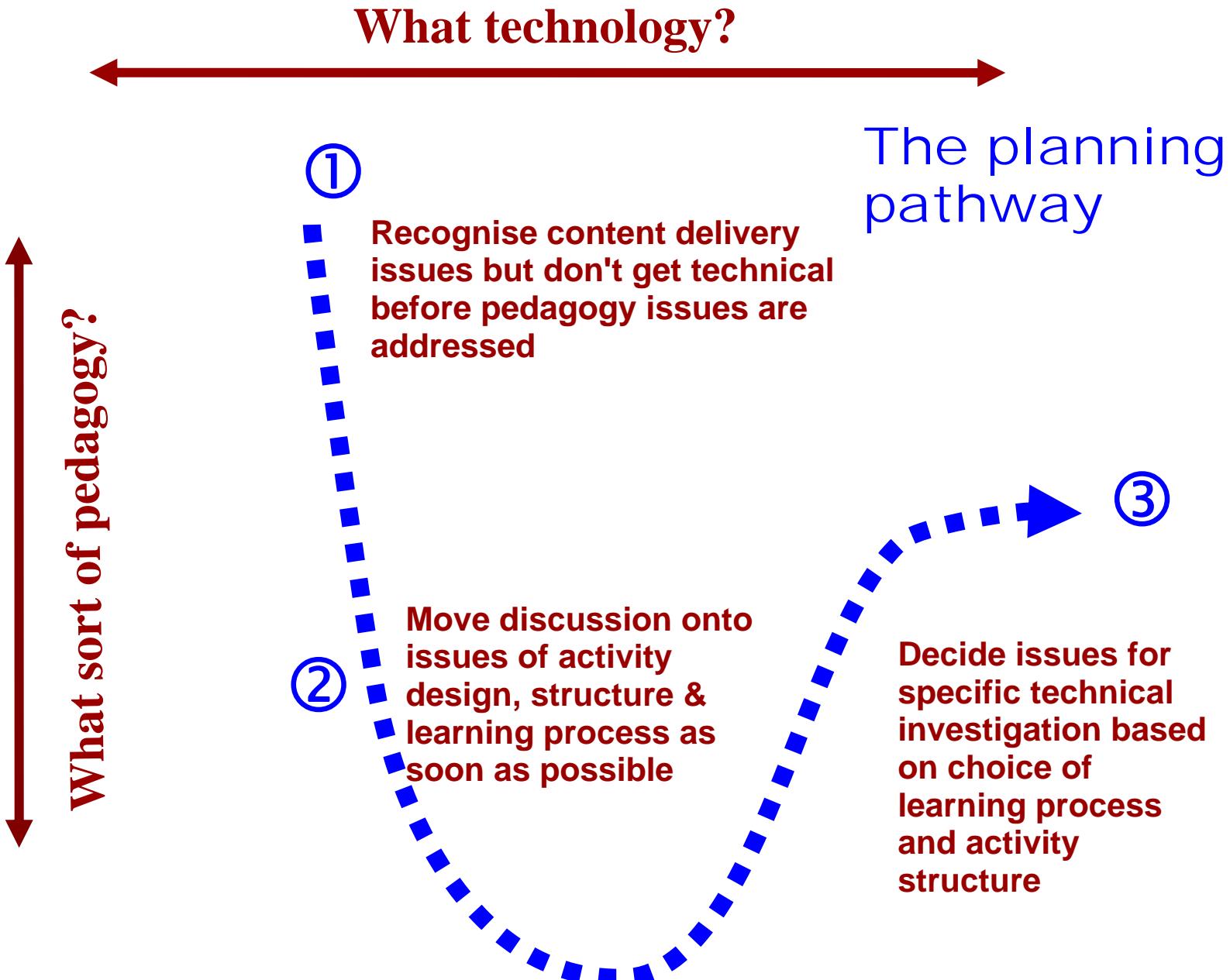
Focus on
content
delivery

Focus on
learning
process

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graph TD; A[Focus on content delivery] <--> B[Focus on learning process]
```



What technology?





Interaction with content

Instructions **History** **Ocular Examination** **Diagnosis**

Mrs Murphy is a 75 year old who presents to you after visiting her optometrist for a general eye examination. He

Presenting Reason  **Help with Scientific Report Writing**

Patient: Peter Abbott

Story : [Emergency Dept](#) : [Medical Ward](#) : [Operating Dept](#) : [Medical Ward](#) : [Discharge](#)

Medical / Surgical Ward - Post-Operative Care - Day 2

Now that Peter has fully woken from anesthetic and he has no immediate post operative complications he is ready to go back to the ward. The Operating Room (OR) nurse from recovery will hand him over to the medical ward nurse

Listen to the nursing handover from the OR nurse to the Med/Surg Ward nurse

- What are possible causes of hypertension?
- What nursing intervention can be implemented for a patient experiencing hypotension?

On return to the ward the ward nurse will complete a set of vital signs which she will record in Peter's chart. The ward nurse will continue to monitor Peter's condition closely as per Charles Darwin vHospital



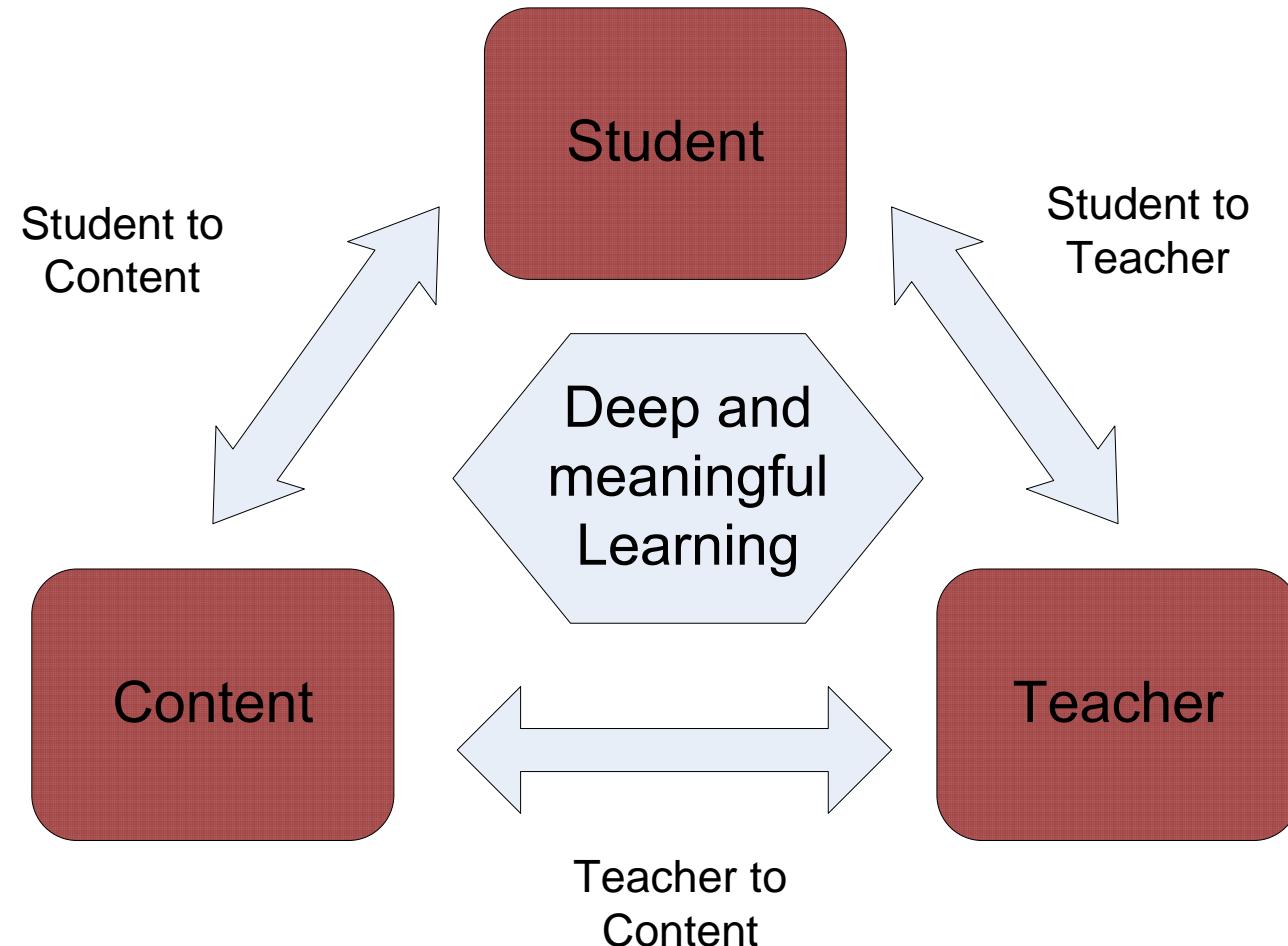


Interaction is the key

Interaction is the defining component of the educational process that occurs when the student transforms the inert information passed onto them from another and constructs it into knowledge with personal application and value.

Garrison & Anderson, 2003 p41 describing Dewey's philosophy of formal education.

Interaction



Trap 2

It doesn't work



Trap 3

It takes too much time

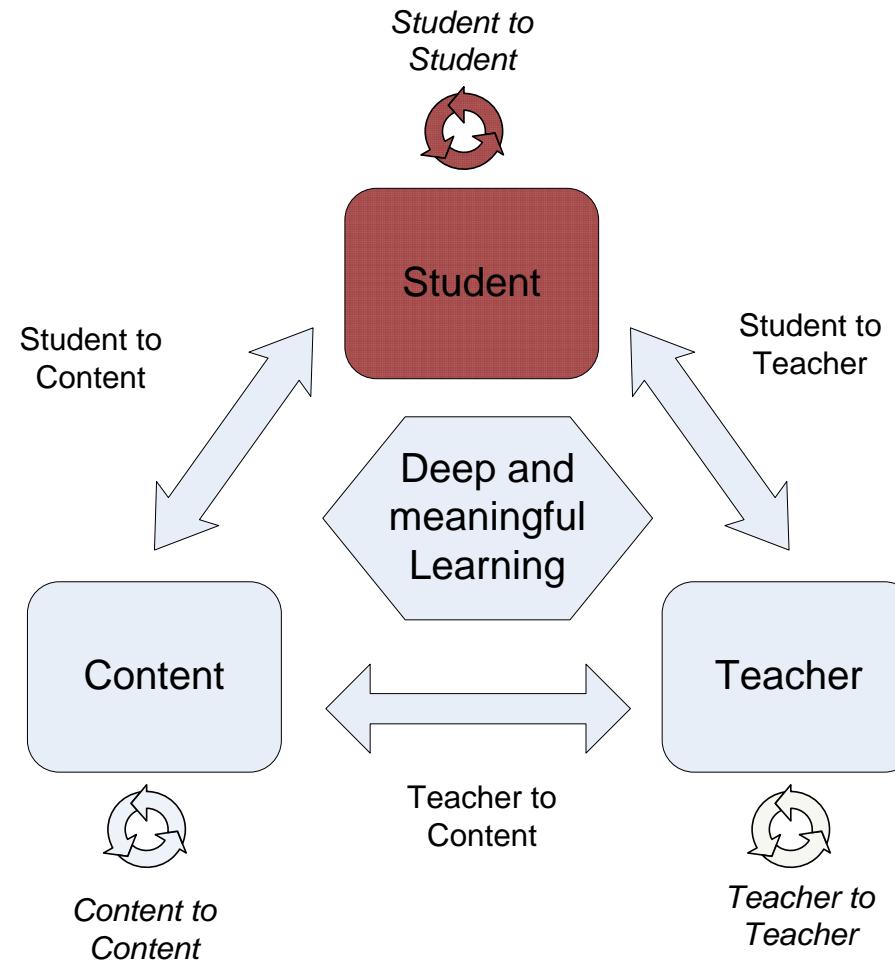
Inadequate preparation of activity

Inadequate preparation of the learner



Learn from the past experience of distance educators and apply this understanding to elearning

A few models can help!



The elearning journey

2000 The beginning

**2001 Refining learning activities,
participation requirements**

2002 Orientation to the task

2003 Analysis of interactions

2004 A model of online learning

2005 Student reflections



Online discussion 2000.....2005



- **4-6 groups of up to 10 students**
- **Asynchronous communication (greater opportunity for reflection on experience)**
- **Initially clinical cases provided by E-moderator & group discussion held,**
- **Group posted a response to each case**
- **E-moderator feedback to group**
- **Later students posted their own cases**

What were our aims?

- **Keep regular contact with students whilst off campus**
- **Encourage students to review academic material whilst having real world clinical experiences**
- **Encourage transfer of knowledge to the applied clinical situation**
- **Encourage reflective practice, critical thinking and self evaluation**
- **Assist students to learn from each other**
- **Develop the professional skill of case analysis and management**
- **Facilitate professionalism by committing to team work activities**

WebCT

myWebCT Resume Course Course Map Check Browser Log Out Help

Control Panel View Designer Options

ORTH3050_2003_s1 Assessment & Management of Refractive Errors S1 2003

Course Menu

Homepage > Discussions > **Group 1**

Discussion Messages: Group 1

Compose message Update listing Search Mark all as read Message options

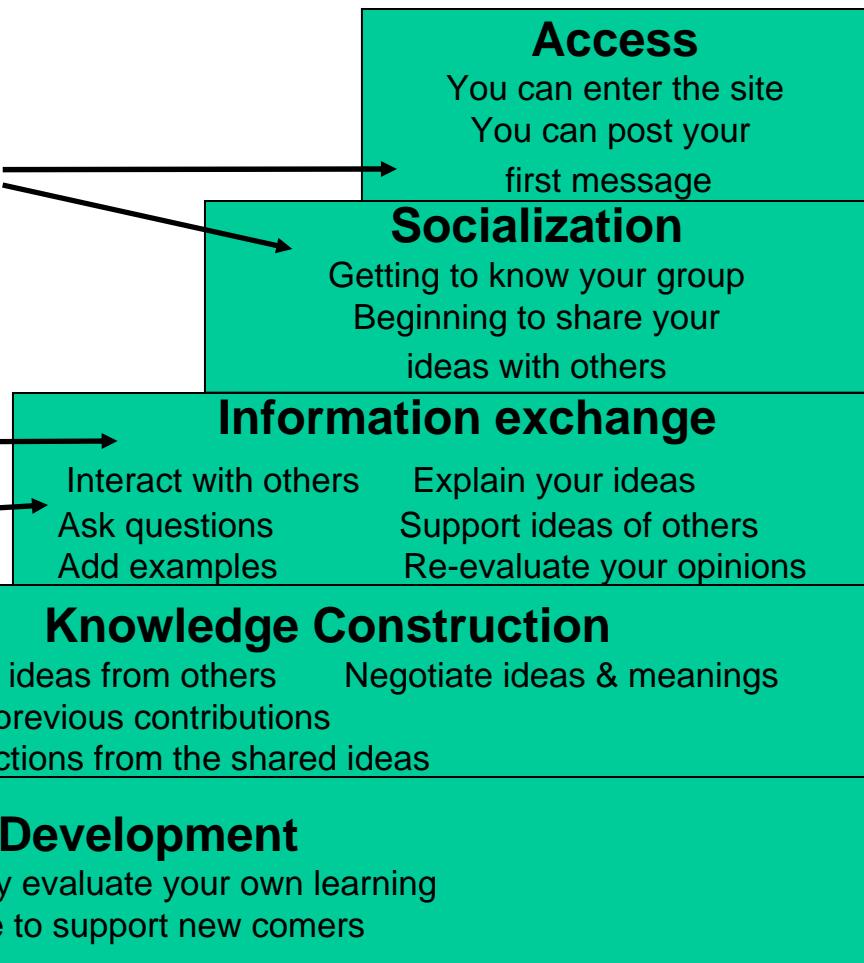
Display: All Unread Threaded Unthreaded Select topic: Group 1 Go

Status	Subject	Author	Date
▶ 1/1	<input type="checkbox"/> Aaron answers question ...		
▶ 1/1	<input type="checkbox"/> Aaron - question 1, part ...		
▶ 1/1	<input type="checkbox"/> Aaron question 1 - part b...		
▶ 1/1	<input type="checkbox"/> Aaron question 1 - part c...		
▶ 1/1	<input type="checkbox"/> Aaron question 1 - part d...		
▶ 1/1	<input type="checkbox"/> Aaron question 1 - part e...		
▶ 1/1	<input type="checkbox"/> Aaron question 1 - part f...		
▶ 1/1	<input type="checkbox"/> Aaron 1a		
▶ 1/1	<input type="checkbox"/> Aaron 1b		
▶ 1/1	<input type="checkbox"/> Aaron 1c		
▶ 1/1	<input type="checkbox"/> Aaron 1d		
▶ 1/1	<input type="checkbox"/> Aaron 1e		
▶ 1/1	<input type="checkbox"/> Aaron 1f		
▶ 0/1	<input type="checkbox"/> Case Aaron 1a		

Internet

Orientation activities

1. *Find your partner*
2. *Using subject headings and threading messages*
3. *Using discussion with unit of study content material*
4. *Analysis of postings*



WebCT myWebCT Resume Course Course Map Check Browser Log Out Help

Control Panel View Designer Options

Course Menu

Homepage > Discussions > **Group D**

0/2	JASON: GROUP ANSWERS	Student 1	March 23, 2004 11:17am
	JASON: GROUP ANSWERS	Student 1	March 23, 2004 11:17am
	↗ Re: JASON: GROUP ANSWERS	Helen Wozniak (ORTH3050)	March 24, 2004 12:43pm
13/13	Mrs Black: Q1		
	Mrs Black: Q1	Student 2	March 26, 2004 10:08pm
	↗ Re: Mrs Black: Q1	Student 3	March 27, 2004 9:53am
	↗ Re: Mrs Black: Q1	Student 3	March 27, 2004 9:56am
	↗ Re: Mrs Black: Q1	Student 4	March 27, 2004 7:42pm
	↗ Re: Mrs Black: Q1	Student 5	April 1, 2004 6:15pm
	↗ Re: Mrs Black: Q1	Student 1	April 4, 2004 10:34am
	↗ Re: Mrs Black: Q1	Student 5	April 4, 2004 9:52pm
	↗ Re: Mrs Black: Q1	Student 5	April 4, 2004 10:15pm
	↗ Re: Mrs Black: Q1	Student 6	April 4, 2004 7:22pm
	↗ Re: Mrs Black: Q1	Student 5	April 4, 2004 9:55pm
	↗ Re: Mrs Black: Q1	Student 2	April 4, 2004 10:04pm
	↗ Re: Mrs Black: Q1	Student 5	April 4, 2004 10:27pm
	↗ Re: Mrs Black: Q1	Student 7	April 6, 2004 10:13am
18/18	Mrs Black Q2		
12/12	Mrs Black Q3		

Impact on learning

2003 n=756

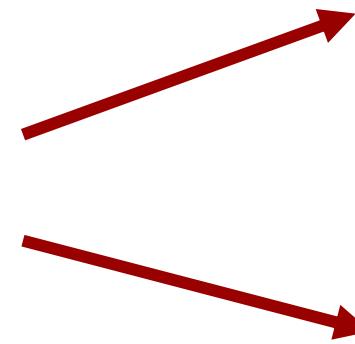
Individual: 92%

Interactive: 8%

2004 n=949

Individual: 54%

Interactive: 46%



Greater number at individual level correlates with lower mark in clinical exams

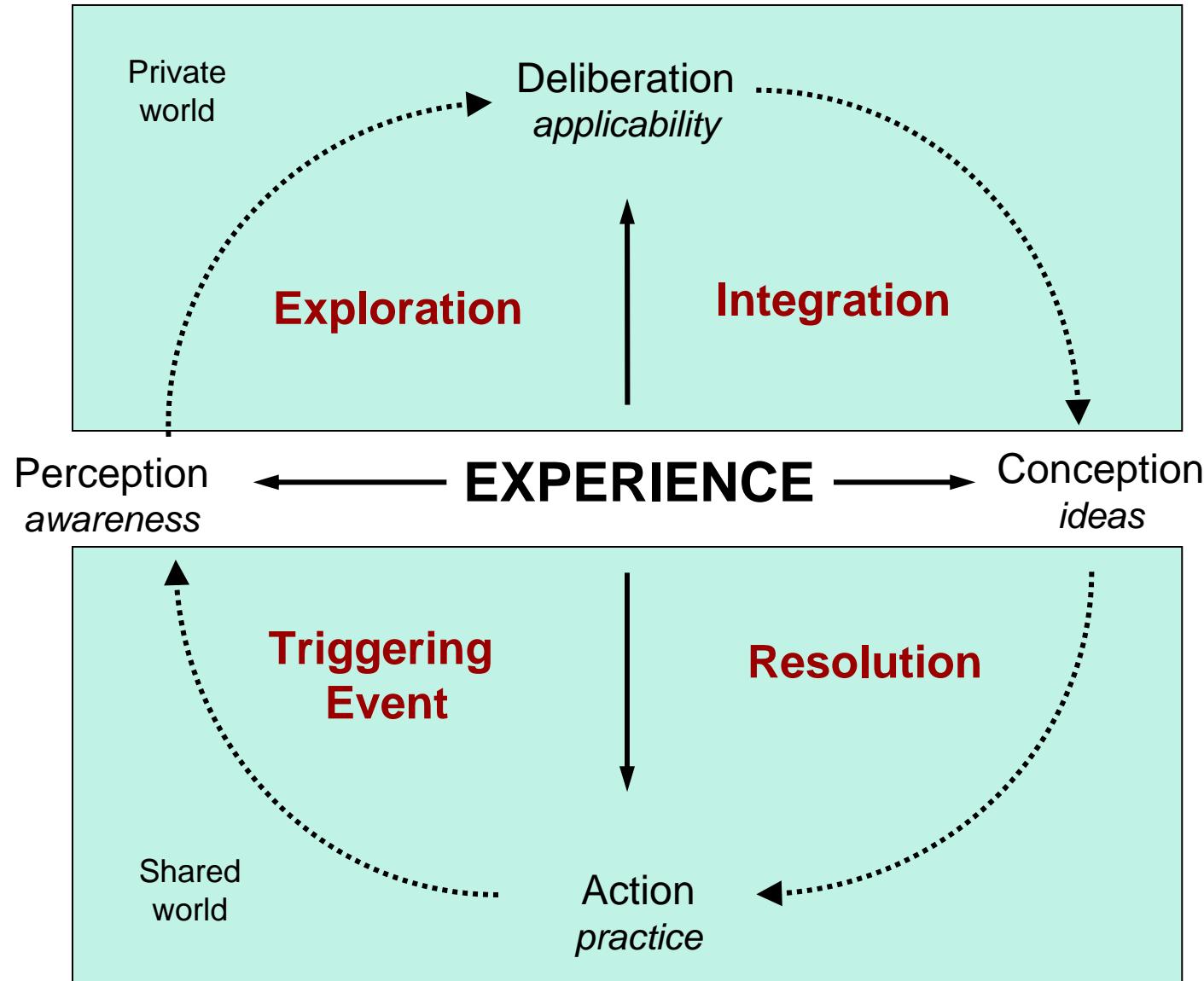
$$r_s = -0.47$$

Greater number at interactive level correlates with higher mark in online cases

$$r_s = 0.76 \text{ & } r_s = 0.69$$

2005 Correlation of Stage on Salmon's model and online participation assessment results

Small correlation between depth of reflection and online assessment results



Practical Inquiry

Garrison D.R, 2007

Where are you in your journey?



Do you have any opportunities?