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# Collaborating with Student Peer Leaders: Fostering Self-Directed Learning

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# Collaborating with Student Peer Leaders: Fostering Self-Directed Learning

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# Questions...

How have you used undergraduate teaching assistants in your classroom?

How could you use undergraduate TAs?

# Workshop goals?

1. My use of undergraduate TAs (aka peer tutors) in second-year economics
2. Fishbowl experience of peer tutor training for problem-based learning; debrief
3. Transfer of knowledge about peer tutor experience in a course taught with PBL

# Culture of T&L in Economics

- Didactic lecturing, traditional testing
- Content-driven, teacher-centric  
(Watts & Becker 2008; Bloemhof 2012)
- Threshold concepts (Meyer & Land 2004)
- **Significant complexity**

*“The learning paradigm ends the lecture’s privileged position, honoring in its place whatever approaches serve best to prompt learning of particular knowledge by particular students.”*

*Barr and Tagg (1995:14)*

# “Why use PBL?”

The traditional sequencing of learning does not reflect real life interaction with the material  
(Neufeld & Barrows 1974, 1043)

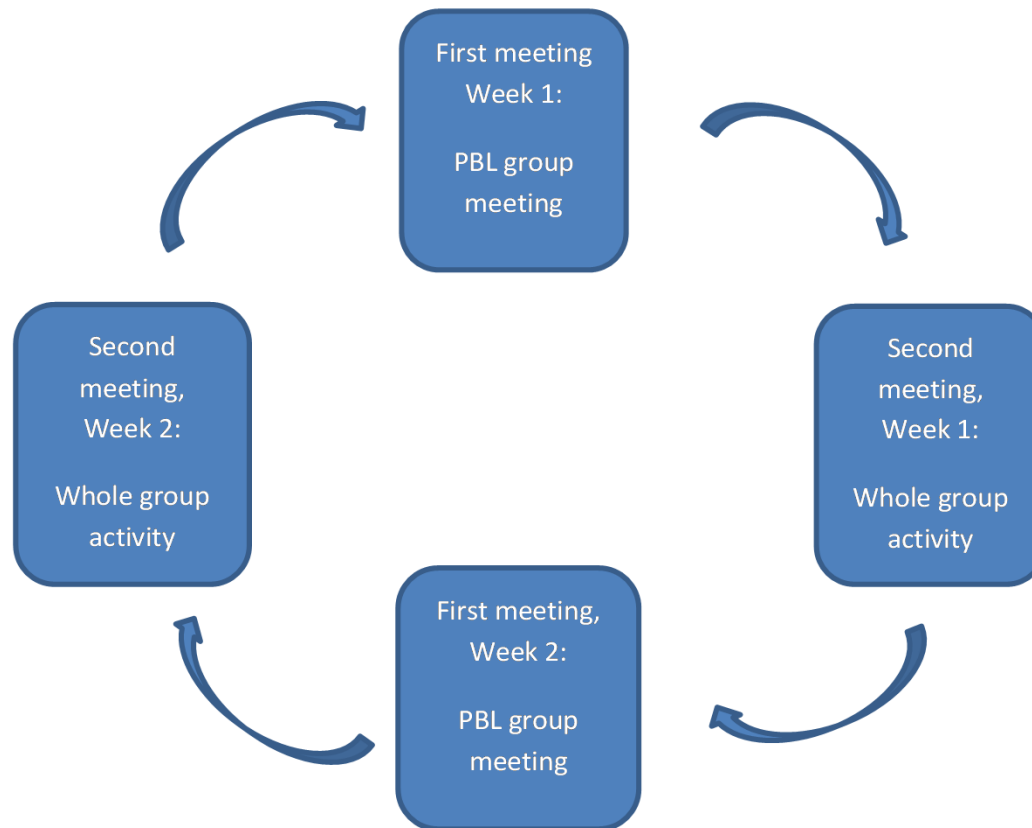
“PBL... is really about knowledge, learned in the context in which it will later be used so that hopefully transfer can be facilitated.”  
(Norman 1997, 264)

# Small-group, self directed PBL

- 2nd yr “survey” of international economics
- Prerequisite: 2 “chalk & talk” theory courses
- McMaster model (Neufeld & Barrows 1974)
  - 4 x 2 week problem cycles, 2 mtgs/week (13 wks)
  - Problem-based individual assessments
  - “just in time” homeworks
  - Final exam randomized on homework problems

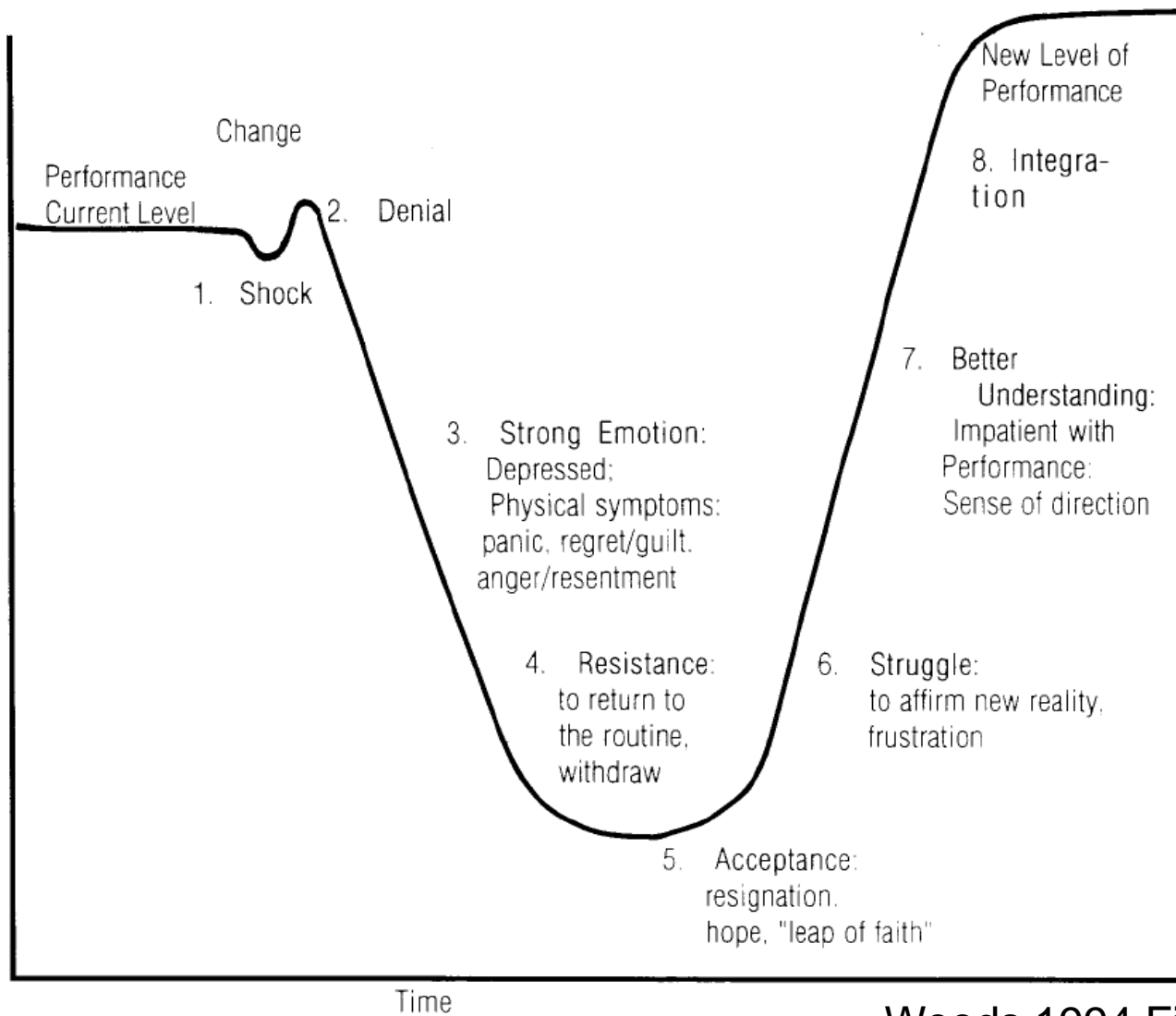


# How PBL works



# Objectives: Peer tutor training

- Engaged empathy for the groups
  - Understanding of aims of PBL process
  - “heads up” about predictable processes



Woods 1994 Figure 1-1

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# Unproductive Questioning

“That’s from Chapter 5 – it’s the principle of comparative advantage, where two countries can always find something to trade if....”

# Unproductive Questioning

“That’s from Chapter 5 – it’s the principle of comparative advantage, where two countries can always find something to trade if....”

- Annihilates structured ambiguity
- Fosters passivity / receptivity
- “one right answer”

# Productive Questioning

“That’s a really good observation, Bill: what resources are others working with....”

“That seems like a particularly useful direction: it seems different from the other comments we’ve been brainstorming.... Anyone like to respond?”

“How could we find out if that were true?”

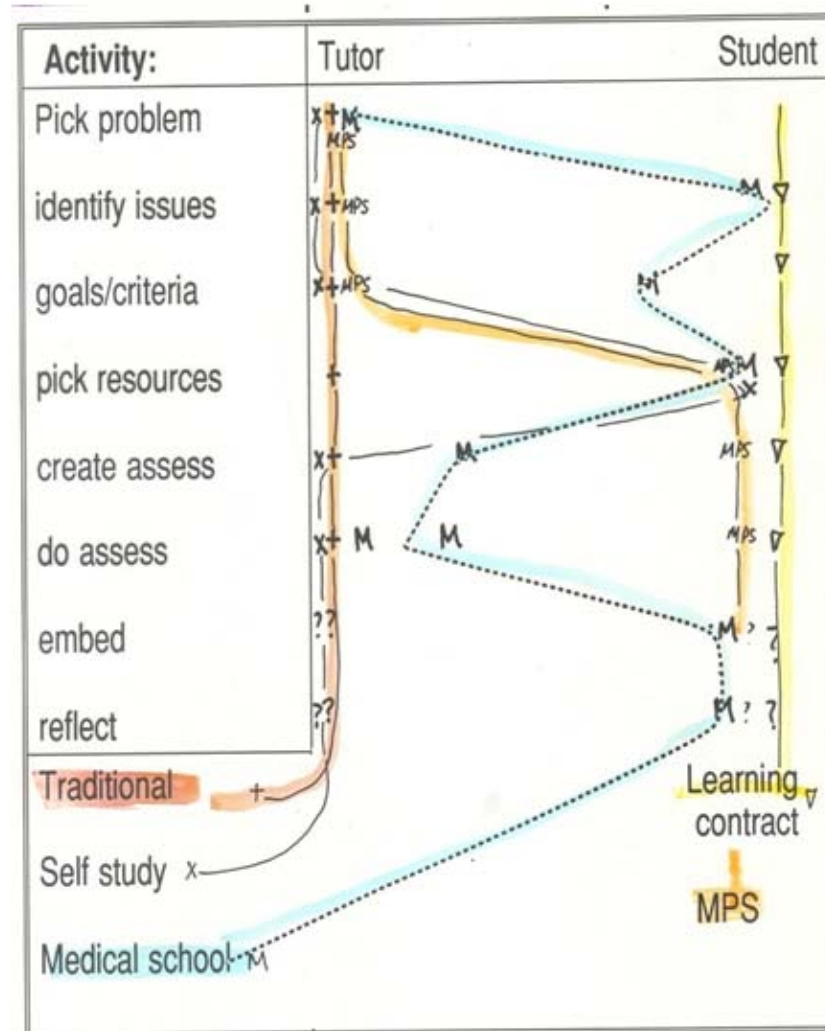
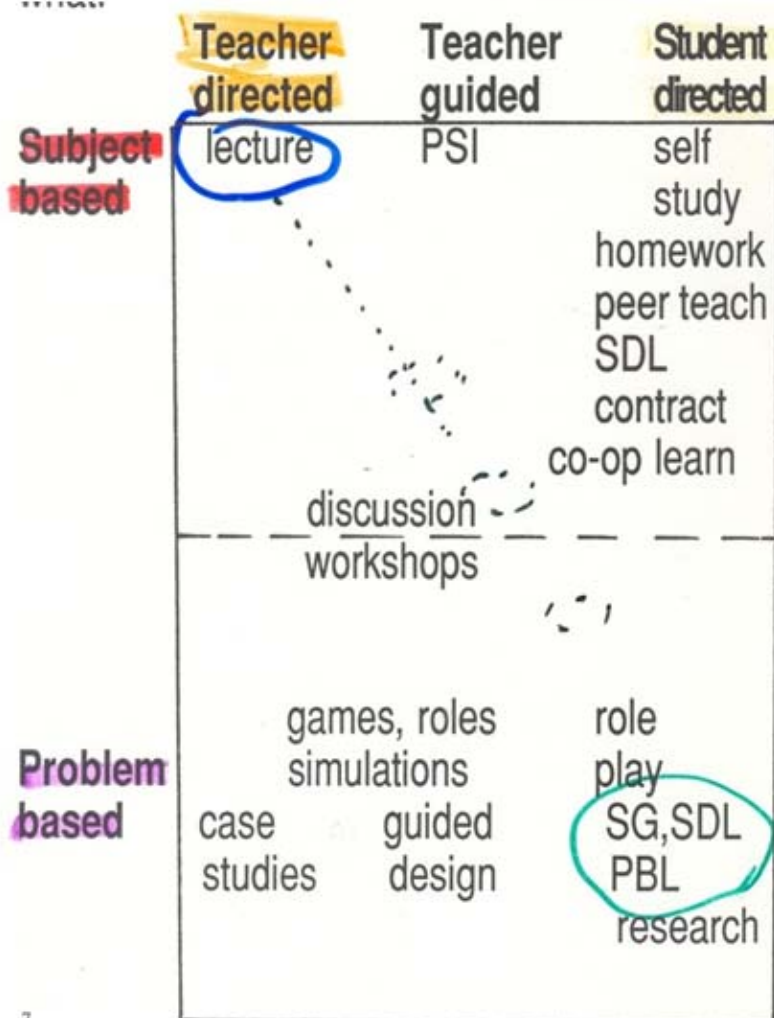
# Objectives: Peer tutor training

- Engaged empathy for the groups
  - Understanding of aims of PBL process
  - “heads up” about predictable processes
- Practice with supportive questioning
- Ability to maintain silence, sit with the group
  - Delinking the transfer model



**As you chat with your chair, she casually drops a bomb:**

**“We are all being asked to do more with less now, and so part of today’s meeting is to just let you know that I’ve had to raise the enrolment cap on your course to 120. I guess this means your self-directed learning will have far wider impact.”**



(Woods, Cornell Univ. keynote Jan 2012)

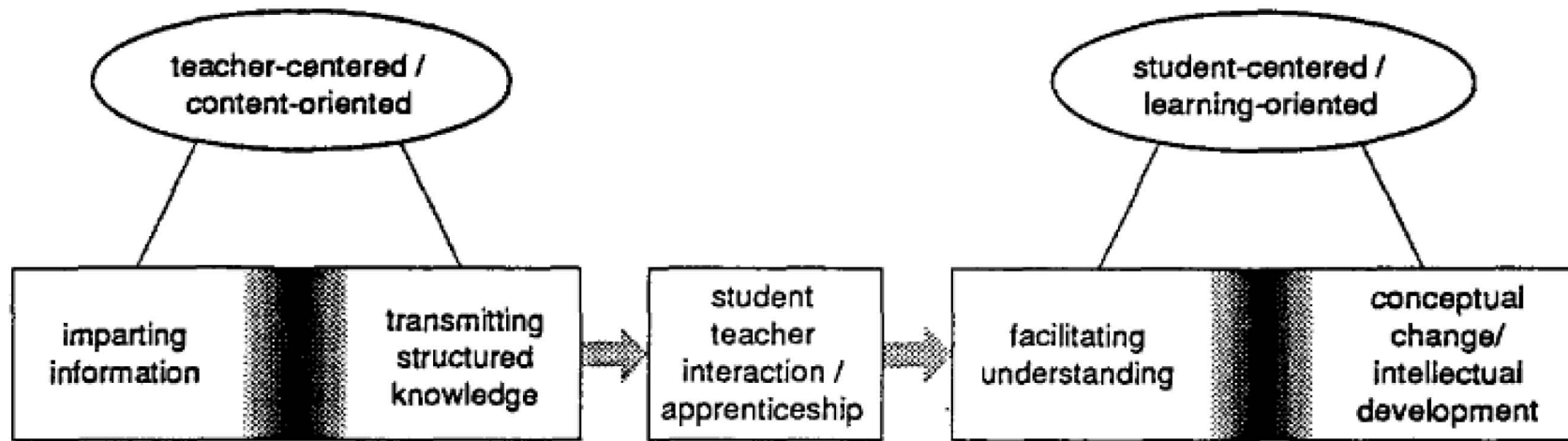


Figure 2. A multiple-level categorisation model of conceptions of teaching.

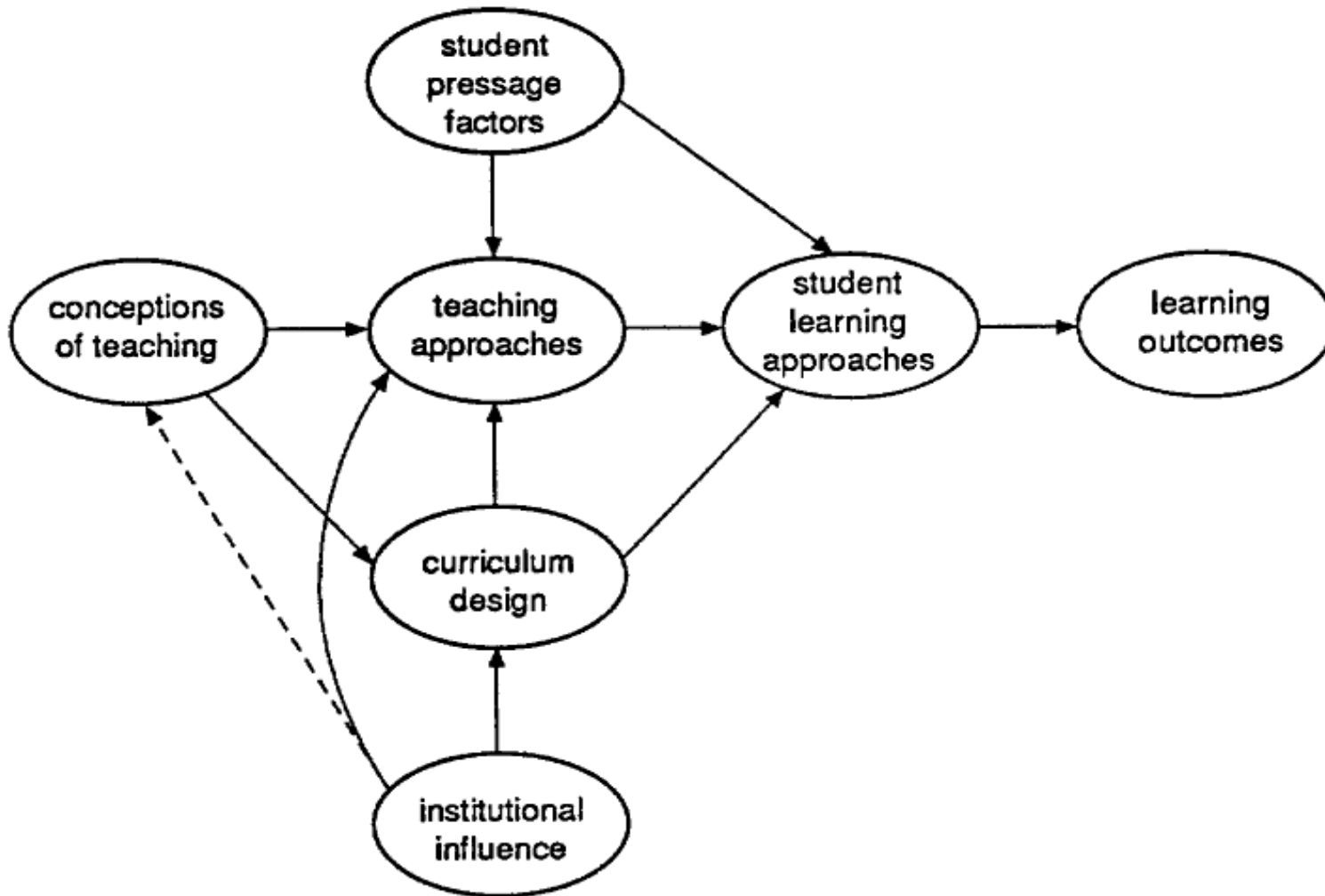


Figure 3. The relationship between conceptions of teaching, teaching approaches and learning outcomes.

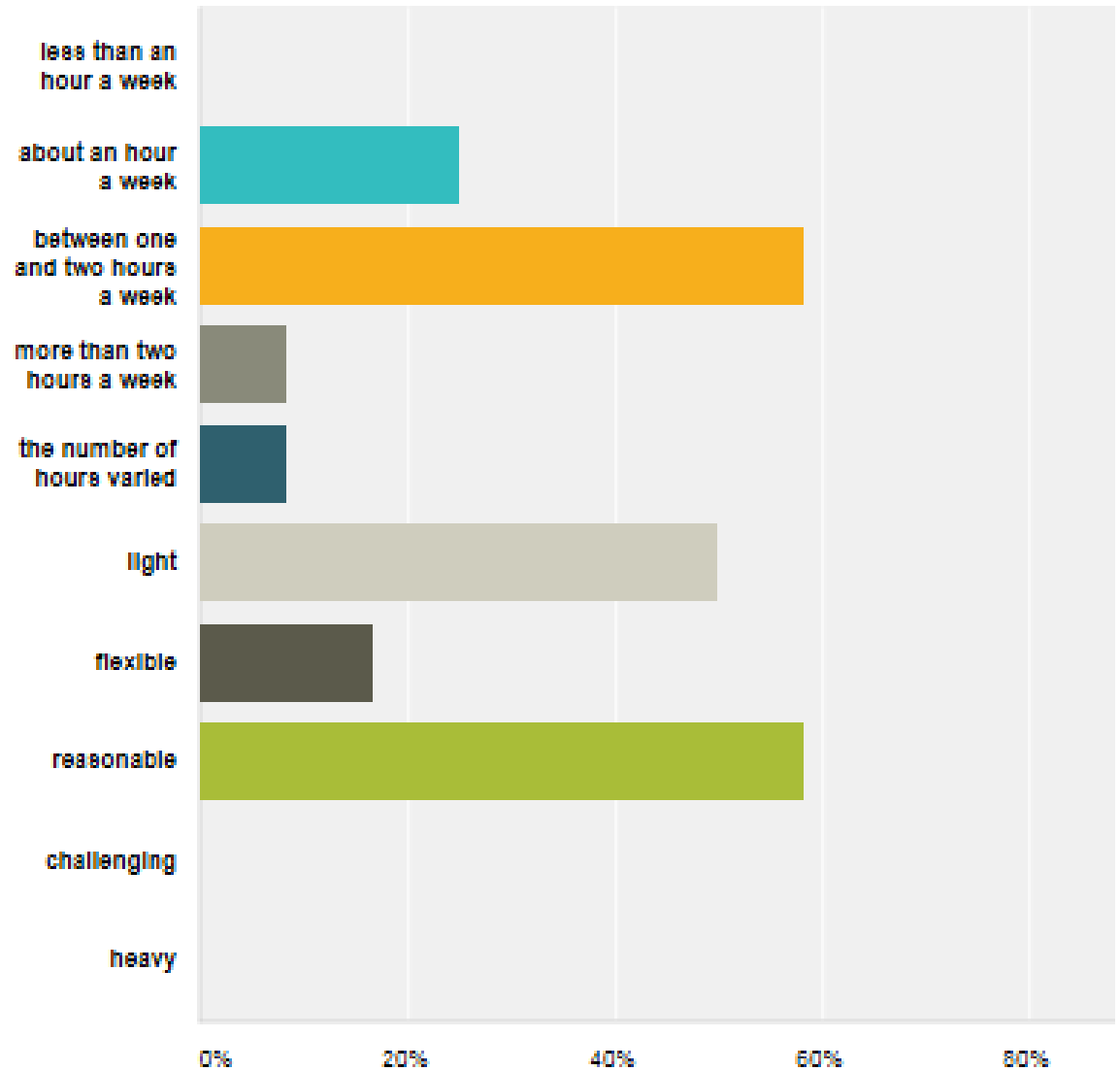
**Kember (1997)**

# Peer tutors respond:

- SurveyMonkey
- Mixture of closed/open ended questions
- 30 students – 12 responses (40%)
  - Group leaders (10)
  - On-line tutors (3)
  - On-line problem checkers (2)
  - Invigilators (3)

## Time Commitment

- Not unduly onerous
- Halo effect



## Supports

- Diversity
- Special skills(4)
  - Curiosity
  - Listening responsively
  - Openminded
  - Calm patience

	Most Helpful	(no label)	(no label)	(no label)	Least Helpful	N/A	Total	Average Rating
email	41.67% 5	16.67% 2	25% 3	0% 0	0% 0	16.67% 2	12	1.80
other peer tutors	8.33% 1	41.67% 5	25% 3	8.33% 1	8.33% 1	8.33% 1	12	2.64
training from Barb	41.67% 5	25% 3	25% 3	0% 0	0% 0	8.33% 1	12	1.82
prior leadership experience	16.67% 2	41.67% 5	25% 3	0% 0	0% 0	16.67% 2	12	2.10
feedback from Barb	66.67% 8	33.33% 4	0% 0	0% 0	0% 0	0% 0	12	1.33
feedback from students	41.67% 5	16.67% 2	25% 3	0% 0	0% 0	16.67% 2	12	1.80
written agendas or instructions	25% 3	66.67% 8	8.33% 1	0% 0	0% 0	0% 0	12	1.83
knowledge of international economics	25% 3	33.33% 4	33.33% 4	0% 0	8.33% 1	0% 0	12	2.33



## Transferrable skills

Plus 3 others:

“Being active...  
while not interfering  
with them (letting  
students work out  
the problems on  
their own, asking the  
right questions, at  
the right times)”

“Active listening”

“Networking...”

Answer Choices	Responses	
time management	58.33%	7
teamwork	50%	6
speaking truth to power	8.33%	1
public speaking	41.67%	5
professional communication	75%	9
problem-solving	75%	9
making supported or convincing arguments	58.33%	7
leading meetings	50%	6
integrity	33.33%	4
experience of commitment and/or follow-through	50%	6
empathy with others	16.67%	2
attention to detail	25%	3
ability to work with people	66.67%	8
a deeper understanding of international economics	41.67%	5
“big picture” thinking	33.33%	4



# Final thoughts

- Valuable to peer tutors
  - Reasonable commitment
  - Rewarding – “gave less than I got”
- Supported: training & ongoing monitoring
- Instructor’s role changes
  - Delegation model (business)

# Reflection

How could you use this in your classroom?

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