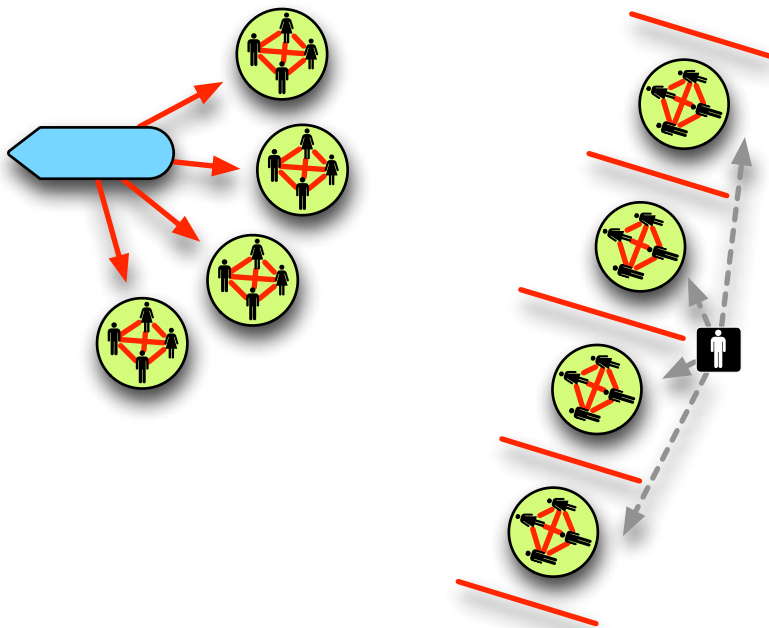


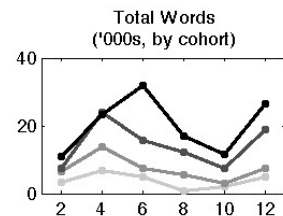
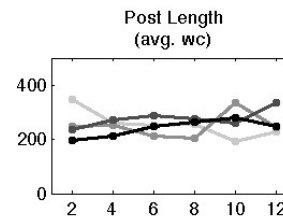
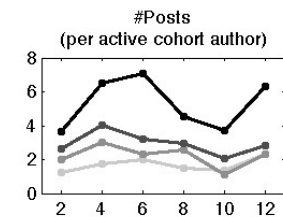
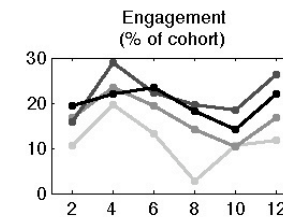
Blended Learning: A player's perspective



Replacing face-to-face tutorials with online discussion groups



Simon Angus
Dept. Economics



Applying *blended* approaches to 'tutorials'

What is great about tutorials

In its best expression ...

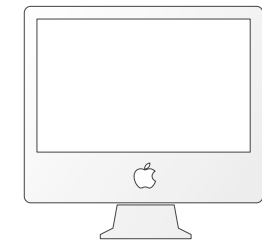
- Vibrant, ad-hoc, spontaneous discussion
- Students all **engage** (listening, reflecting, contributing)
- Collaborative learning happens
- Tutor reports **key insights**, **flags problems**, and gives you feedback on the '**mood**'
- Tutor is well accomplished, competent, organised, and **represents the unit well**.

What is not great about tutorials

- Not everyone feels **comfortable to contribute**
- **Hard to mark** 'contribution' or analyse what is 'produced' during a tutorial
- Some personalities **dominate**
- **Large size** for the time you have
- **Layer/distance** between lecturer and students

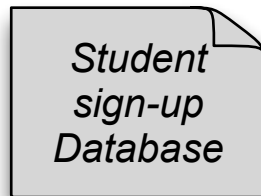
... they happen regularly!

The setup: assignment to groups

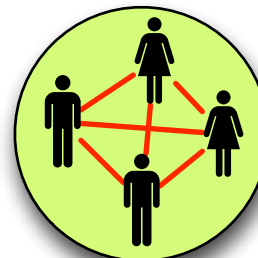
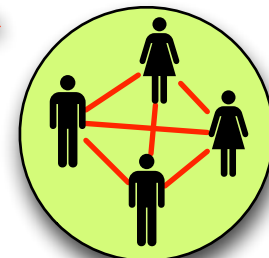
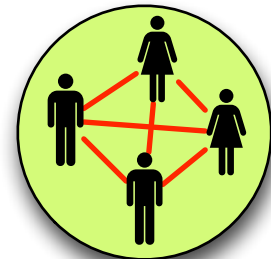
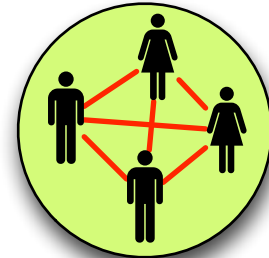
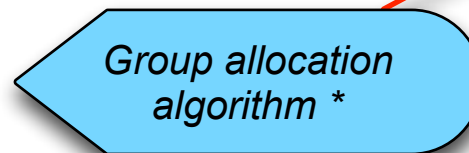


Online Sign-up
(Google Doc)

*~ 150 students
2nd year / graduate students
Must sign-up by end of week 1*



Student
sign-up
Database



*~ 30 groups
4-5 members in each*

** Ask me at the end about group allocation ...*

Group management & feedback

All groups see 'broadcast' areas:

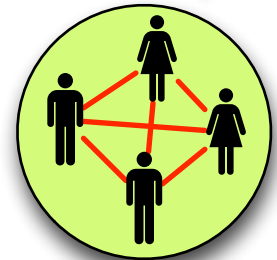
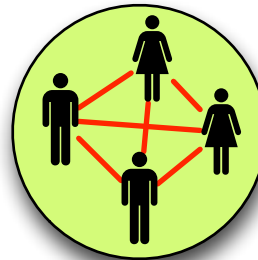
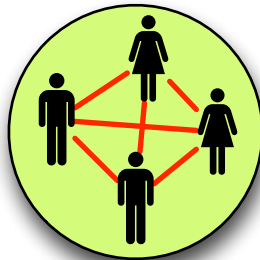
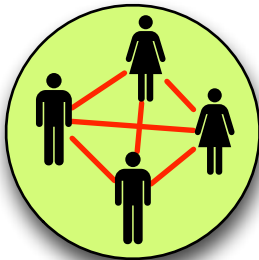
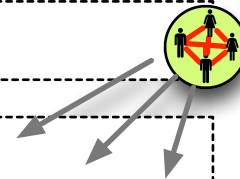
- FAQs
- 'Couldn't help noticing'
- 'Discussion of the week'
- Common questions

... Lecture FAQs

'Discussion of the week'

'Couldn't help noticing ...'

Common Discussion Questions ...



Each group can only see its own group of 4
--> increased accountability (less free-riding)
--> repeated game setup (less 'flaming')

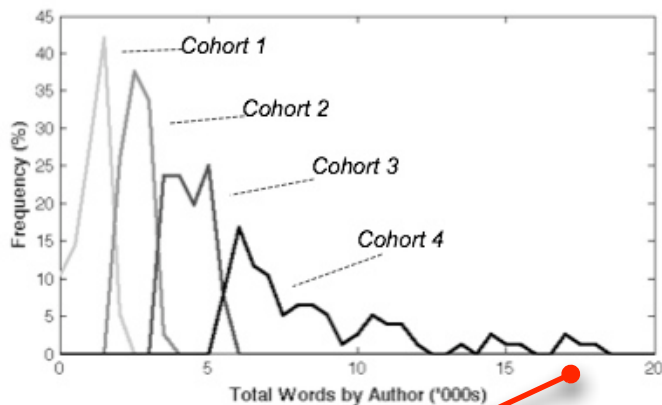


Tutor / Lecturer able to see all groups, and engages ~ once every 3 weeks (on a cycle)

Some analysis: How do they contribute?

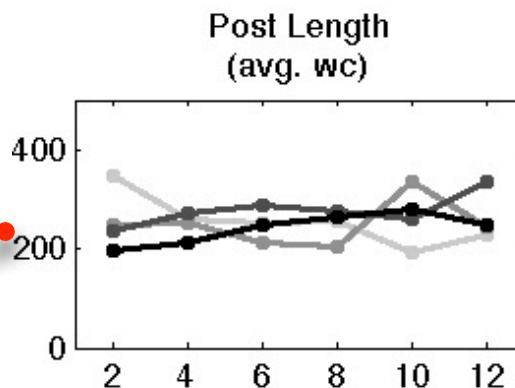
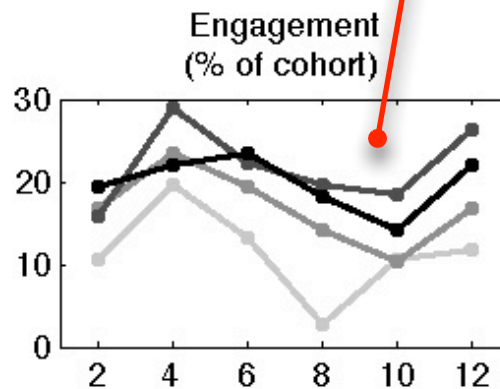
Break down by number of words posted *:

	>	<=	
Cohort 1:	33	1,843	76 students
Cohort 2:	1,843	3,261	77 students
Cohort 3:	3,261	5,522	76 students
Cohort 4:	5,522	17,965	77 students



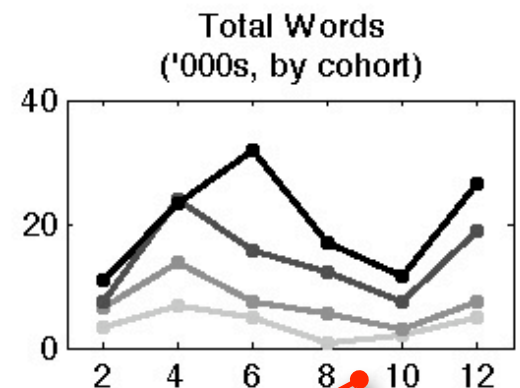
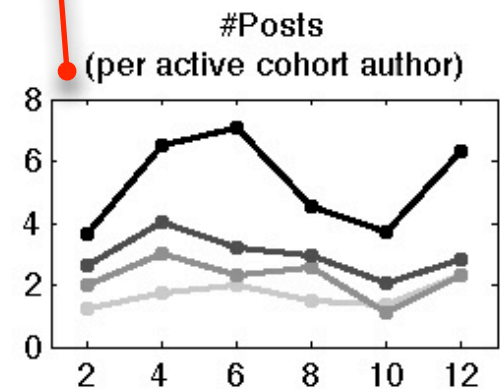
Yes, some students contributed > 15,000 words over the semester (it was worth 15%)

There is a 'natural length' for a post (around 250 words)



The 'top contributors' were simply posting more often

... and more consistently



'Time' budget constraint kicks in during weeks 8-9 (essay due end of week 9)

Student experience ...

From the student's perspective ...

- 'Level playing field' (being heard)
- Building long-term collaborative discussion experiences
- Confidence to partake in posting materials to the 'public space' (e.g. Couldn't help noticing)
- Time efficient, and flexible.

Some student comments ...

The discussion board was great. It made sure you stayed on top of things and allowed for the expansion of ideas.

Student, ECC2810, S1 2008, anonymous survey

The readings and links in the blackboard are very helpful during my learning. ... the discussion log also create a way for us to help each other and gain more ideas which is very useful.

Student, ECC2800, S1 2009, anonymous survey

Online discussions in the literature ...

"I gain an insight into what other people from all walks of life have in their minds. I would never run into these people in real life, and if I did, they wouldn't be open to telling me what I think. On a message board, people seem to say what they feel" [Board19].

"I like the way that it allows everyone, world wide, a forum to address their issues. It shows everyone's point of view. Not just yours" [Chat13].

Source: Stromer-Galley, J. (2003). Diversity of Political Conversation on the Internet: Users' Perspectives. *Journal of Computer-Mediated Communication*, 8(3).

From my perspective ...

Pros

Blended: different mode of engagement

Personal, **direct** feedback (rather than via tutor)

Student's like it:

- students are **comfortable online**
- students appreciate **flexibility**
- students write a surprisingly large amount (some > 17,000 words) (yes, for 15 marks!)

Bird's-eye view: easy to get a feel for where students are at (see across 130 students easily)

Marking ...

Cons

Can be **time-consuming** (addictive?)

Need to train a tutor

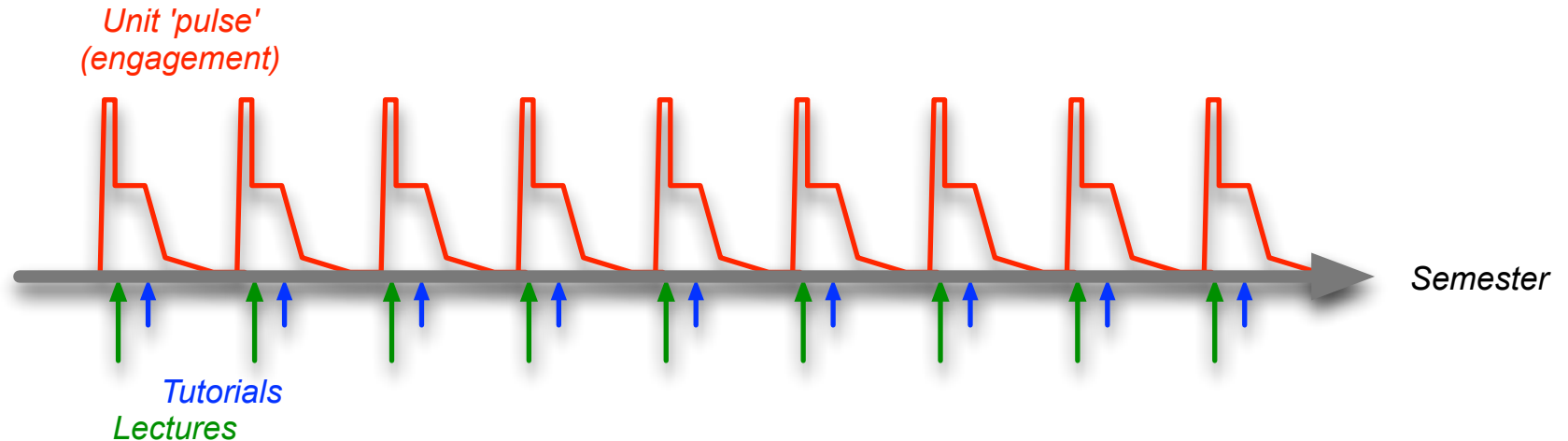
Some groups **fail** (~ 1/15) (what to do?)

Group assignment ...

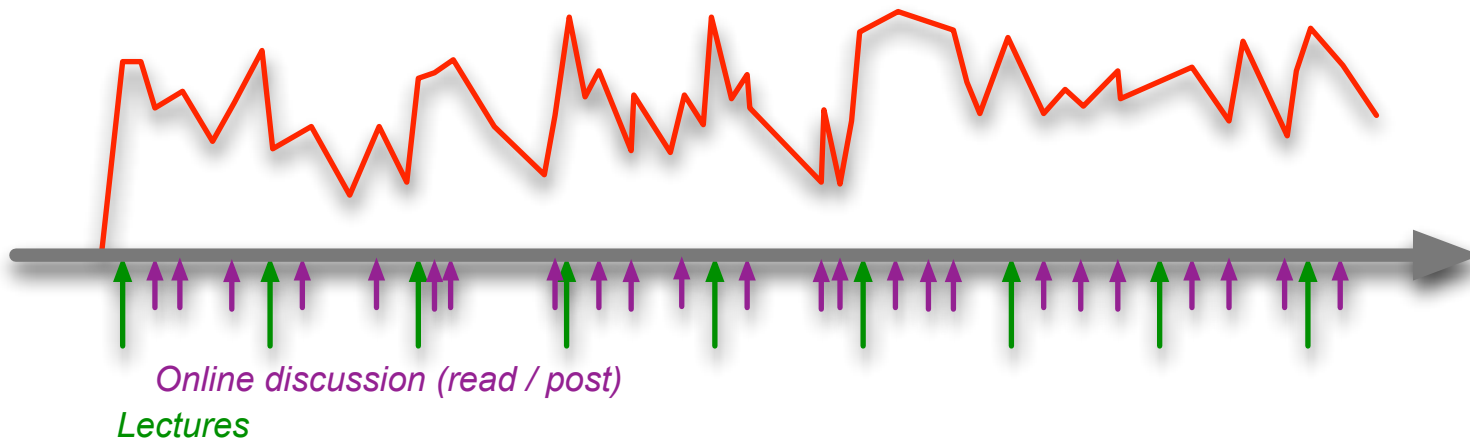
Marking ...

Reflection: what does 'blended' add here?

Standard model (lectures / tutorials)

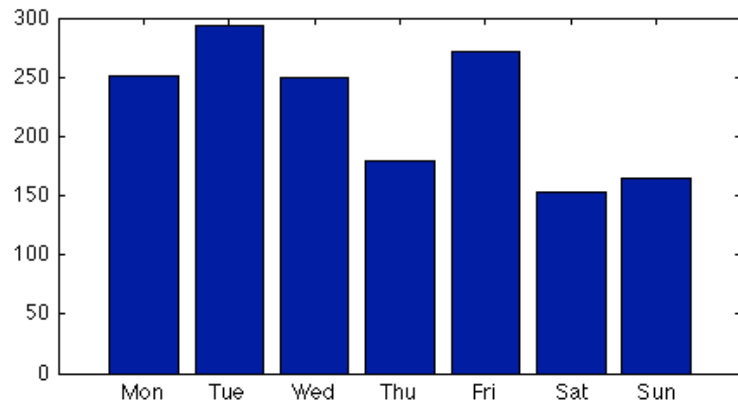


Multi-channel (e.g. lectures / online discussions)



Reflection: what does 'blended' add here?

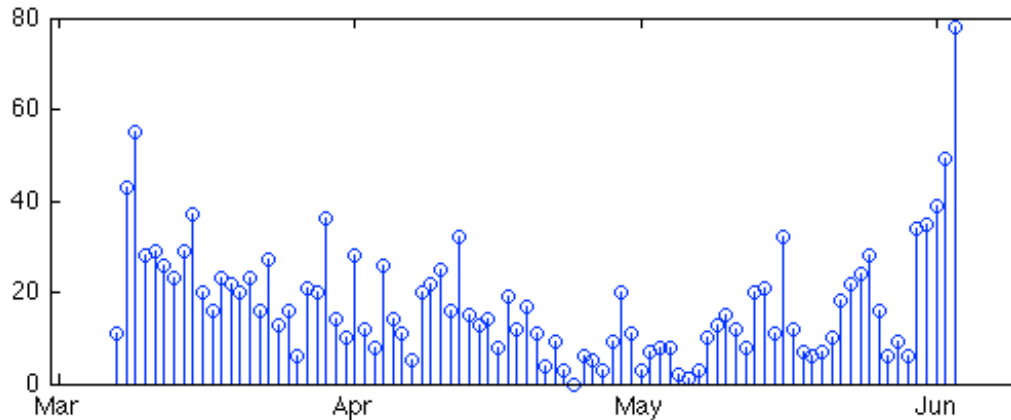
Posts per
day-of-week



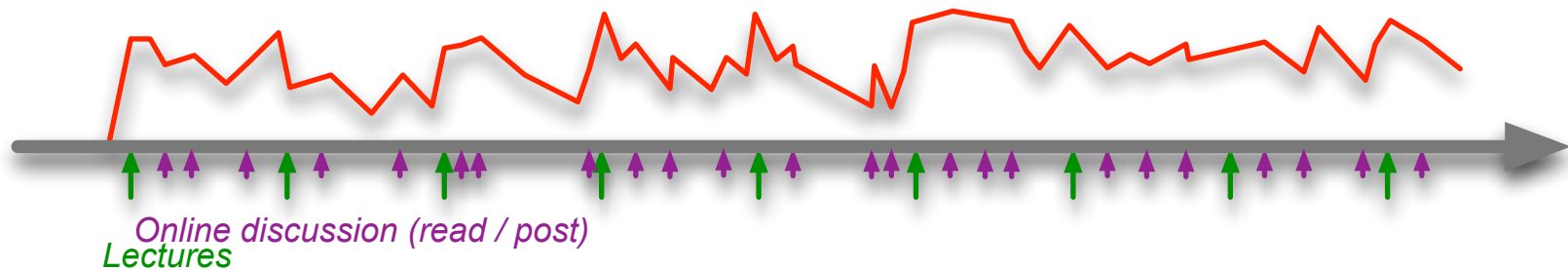
ECC2800 2011 data

Percentile	Posts
10	5
20	7
30	8
40	10
50	13
60	15
70	18
80	23
90	33
100	60

Posts per day



Multi-channel (e.g. lectures / online discussions)



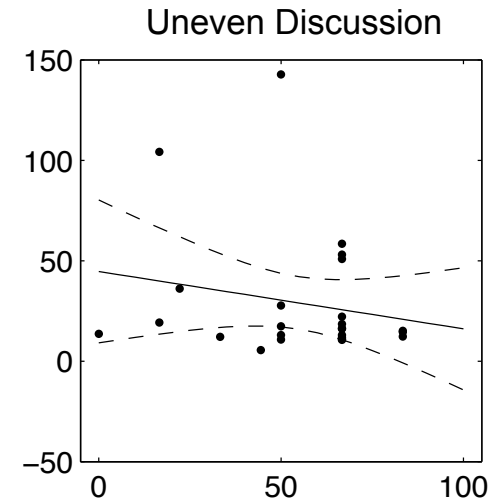
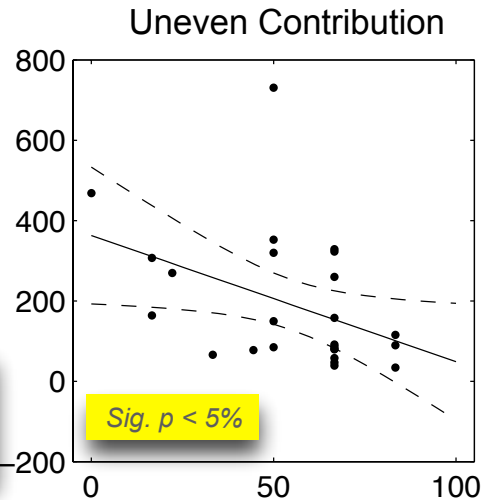
[new!] Opinion diversity matters ...

2011 data, 25 groups

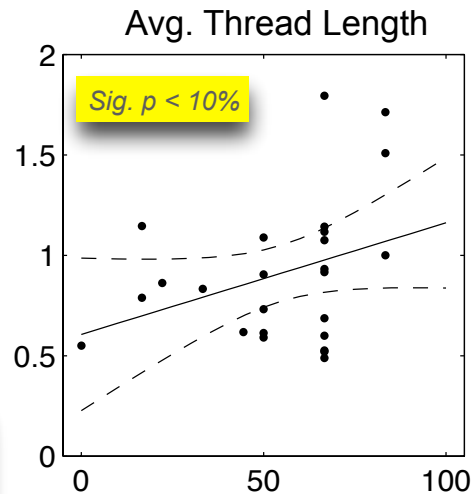
'Diversity' index (x-axis) based on 3 orthogonal dimensions from sign-up survey.

'Outputs' measure 'good discussion' group metrics

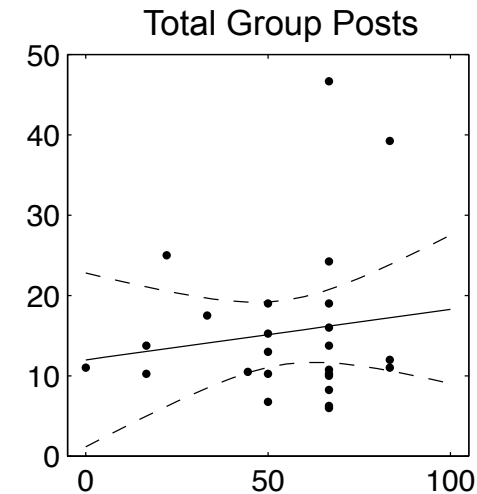
More Diverse groups have more even contributions



Network of Discussion measure has the right sign, but not sig. (more data?)



More Diverse groups have longer discussions



Total Group Posts (total effort) isn't affected

→ Increasing Group Opinion Diversity