Using Microblogging to facilitate Community of Inquiry: An Australian tertiary experience

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Background

- Students spending less time interacting with each other in class and out of class (anecdotal)
- Could be many factors responsible for this
- One factor is that LMS discussion boards don't push info out to students …

Microblogging

ೞ … Twitter and similar tools

ೞ More "push" than LMS

ೞ Allows discussion across units, departments and into wider society

ೞ Literature said there is potential for ed use, but some drawbacks

http://communitiesofinquiry.com/model

communitiesofinquiry.com/model ☆ ▾ C community of inquiry 🔍

Community of Inquiry

Welcome   CoI Model   Papers   News   Contact

□□□ **CoI Model**

An educational community of inquiry is a group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding.

The Community of Inquiry theoretical framework represents a process of creating a deep and meaningful (collaborative-constructivist) learning experience through the development of three interdependent elements - social, cognitive and teaching presence.

Social presence is "the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities." (Garrison, 2009)

Teaching Presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes (Anderson, Rourke, Garrison, & Archer, 2001).

Cognitive Presence is the extent to which learners are able to construct and confirm meaning through sustained reflection

Community of Inquiry

Social Presence

Supporting Discourse

Cognitive Presence

Educational Experience

Setting Climate

Selecting Content

Teaching Presence

Communication Medium

Scenario

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- ୬ 2nd Year Undergrad students – eBusiness unit
- ୬ Learning activities in tutorials – had a component that asked students to tweet (encouraged by staff to tweet, but not assessed)
- ୬ In-class activities on using hashtags, managing tweets, etc.
- ୬ Collaborated with an American instructor whose students were covering similar material
- ୬ The curriculum topics around which microblogging was encouraged included privacy, ethics and censorship

Data Set

 os list of tweets tagged as being relevant to the curriculum-related discussions over a four-week period

os Four-week period = three week overlap in teaching times + 1 extra week (the discussions continued)

Method

- Tweets content-analysed using a coding scheme adopted is adapted from Garrison et al. (2006)
- Initial attempt at coding - "message level coding"
  - Coder agreement across two coders - 77%
  - This was due to several tweets being deemed to fit two categories
- … so re-coded for primary and secondary category, coder agreement rose to > 98%
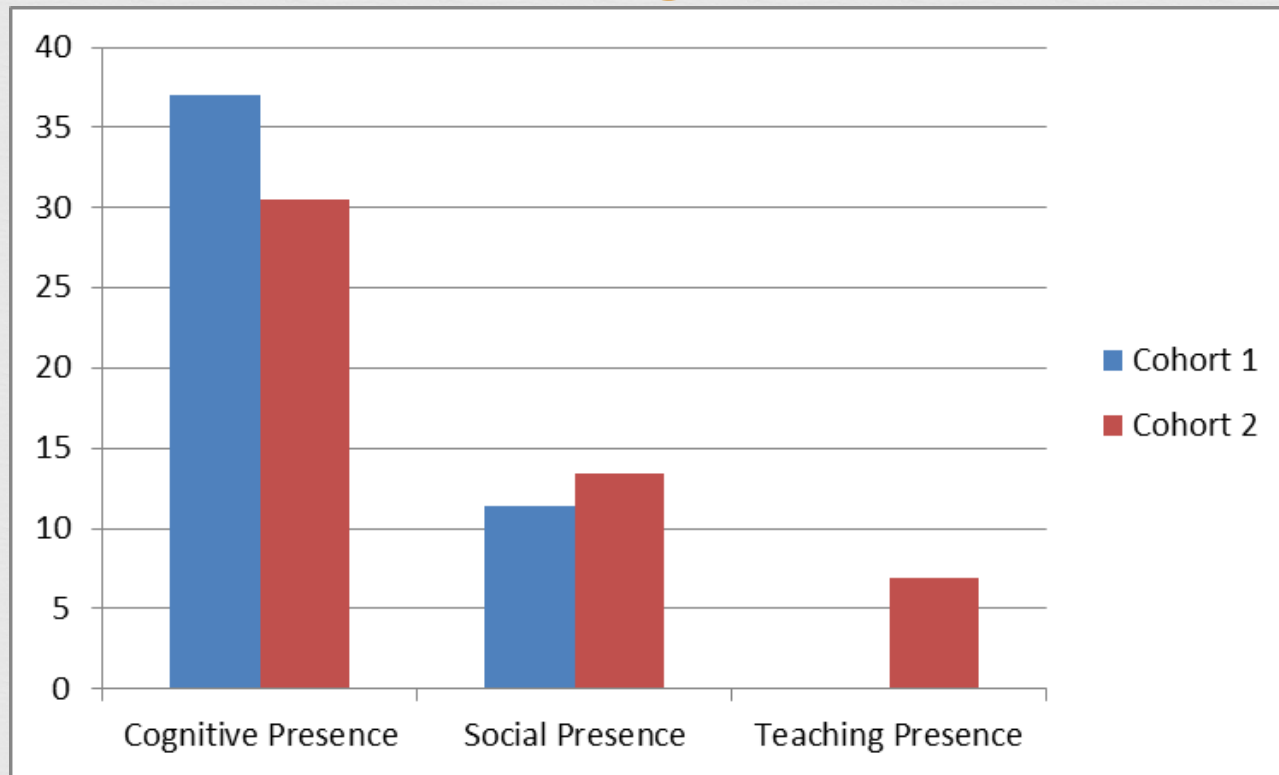- Garrison et al. (2006) say you can do this, but be careful …

Results – overall numbers

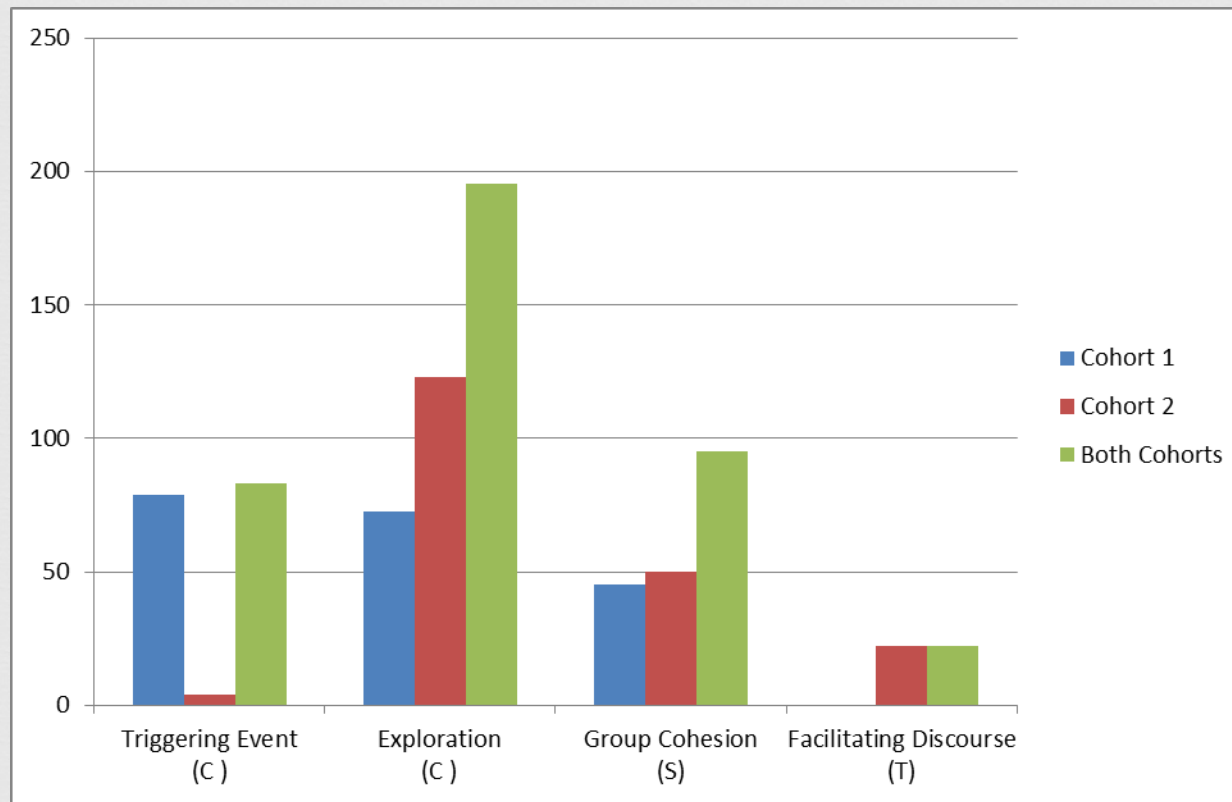|	Cohort 1 (US)	Cohort 2 (Aus)
Number of Tweets	161	163
Number of students	20 (of 35)	27 (of 45)
Participation	57%	60%
Codes/tweet	1.6	1.55

Results - presence

Results - Frequent Indicators

Findings - I

Cognitive presence indicated more strongly than Social

- Seems to contradict Java et al (2007), Naaman (2010)
  - Context
  - Design of learning activity

- Dunlap & Lowenthal (2009a) focus on social presence, reflect on potential for others

  - Our preliminary findings support their reflection.

Findings - II

 Encouraging level of participation

 Approx 60%, non-assessed activity

 Inter-cohort interaction

 Discussion continued for longer than scheduled

Findings III

Difference in indicators from two cohorts

Generally speaking, pattern across cohorts similar

Cohort 1 much higher CTP, Cohort 2 higher CEX

For a particular student, the ratio of CEX/CTP is an indicator of how much they are interacting rather than simply broadcasting

Findings IV

Some concerns for us in terms of learning activity design and CoI facilitation:

ℛ Limited teaching presence demonstrated by students

ℛ No occurrence of cognitive presence indicator resolution (CRE):

   ℛ "Resolves an issue, brings a discussion to a close, uses ideas from learning material to settle an argument"

Future work

- Limitations
  - small
  - Short

- Engage with other academics through a common framework (to appear)

- If you would like your students to participate with ours, please contact me or Suku

That's all folks ☺

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ℰ **Thanks for listening!**

ℰ Suggestions

ℰ Comments

ℰ Questions

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