

Using insider research to study teacher engagement with video conferencing in first-year classes

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HEALTH + ENVIRONMENTAL SCIENCES

Background

- Social and academic development (Tinto, 1993)
- Danger of disconnection in large classes (Nicol, 2010)
- Challenges of diverse student body (Harvey, Drew, & Smith, 2006)
- Digital tools can help but teacher uptake varies (Blin & Munro, 2008)
- Teacher attitudes and responses to new technologies can be a major predictor of their success (Albirini, 2006)

Research Agenda

Let's study teacher responses to a recently introduced technology

- How does it affect what teachers think?
- How does it affect what teachers do?

Let's study it from the <u>inside</u>, providing a "backstage" perspective (Goffman, 1971; Roxå & Mårtensson, 2009)

Insider research

An insider is "an individual who possesses intimate knowledge of the community and its members due to previous and ongoing association with that community and its members" (Labaree, 2002, p. 100).

- The insider has "epistemological privilege" (Griffith, 1998, p. 362).
- The insider/outsider dichotomy is simplistic (Merton, 1972).
- Insider research can be far from straightforward, raising ethical and methodological dilemmas (Labaree, 2002; Mercer, 2006).

Details of project

Question	How does video conferencing affect teacher thought and practice?
Context?	Four large (800 - 1000 students) first-year classes
Who?	17 lecturers and 6 key informants
When?	Semester one, 2011 (Feb-June, 2011)
Technology?	Use of video conferencing to simultaneously connect four lecture venues within Auckland
Objectives?	 To better understand relationships between teachers, pedagogy, and technology To improve practice with the video conferencing

Data set

Paper	Lecturers	Post lecture accounts	Video recordings	Group interviews	Other interviews
А	3	10	5	14	6
В	3	5	2		
С	6	15	3		
D	5	13	7		
Totals	17	43	17	14	6

Teacher as technician

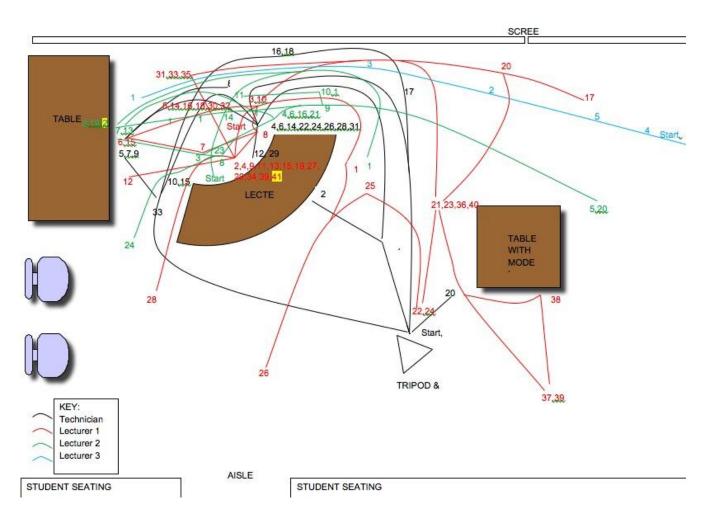


Chronic uncertainty: The persistent blue box

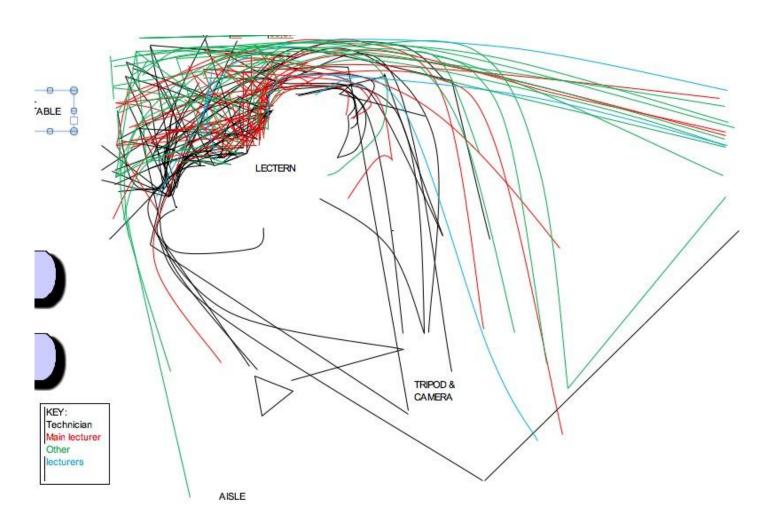


ASCILITE 2011: Changing demands, changing directions

Mapping movement



Combining mappings



Most to least frequent activities of top 10s

Activity	Main L	Tech 1	Other Ls
Talking to technician 1	146		27
Walking away from podium	88	142	44
Walking into podium	96	139	40
Using remote		129	
Looking at technician's computer		116	
Looking at main screen	113	90	19
Talking to main lecturer		101	62
Using mouse	89		
Looking at podium computer screen	82		13
Adjusting microphone	78	52	
Steps back from podium	74	44	18
Using Console		71	
Talking to other lecturer	64		
Talking to students	59		
Steps forward to podium		49	13
Waiting			16
Pointing at podium computer screen			10

Most to least frequent of top 5s

Activity	Main L	Tech 1	Other Ls
Hand gestures	70	14	14
Smiling	36	17	
Touching hair	22	16	
Hands on hips	20		5
Picking up/putting down object	19	12	7
Looks concerned			7
Rubs face		7	
Looks at watch			5

Adaptation	69
Belief about resourcing	1
Beliefs about students	37
Beliefs about teaching and learning	37
5 Benefits	51
Broader forces	31
Chronic Uncertainty	28
Chronological	29
Cross-paper communication	3
Distrust of technology	5
Emerging trust of technology	1
Expectations	19
Global vs local tensions	29
Identity	70
imposition of tool	1
Inter-personal tensions	8
Key informants case	6
Lack of communication	11
Lack of preparation	27
Learning on the job	1
Loss of something important	103
Negative anticipation	12
Paper A case	14
Paper B Case	9
Paper C Case	20
Paper D Case	16
Personal response	27
Questioning rationale	23
Retrofitting technology into an existing space	2
Teaching has changed	78
Technical assumptions	15
Technical issues & constraints	26
Technical limitation	1
Time awareness	1
Weighing costs vs benefits	2
Workload issues	9

Insider research: Benefits

- Access to restricted areas of practice
- Ongoing relationships with staff
- Use of implicit knowledge
- Credibility
- Camaraderie (v/c as the adversary)

Insider research: Ethical Tensions

- Does not necessarily guarantee access
- Power relations in the workplace
- Divided loyalties: coworkers vs participants
- Blurred boundaries
- Too embedded / lack of objectivity
- Bringing the backstage to the frontstage

Concluding thoughts

- Fine-grained depictions of teaching "at the coalface" are invaluable; insider research is a useful strategy
- Use of technology can be politically and emotionally charged; there is a risk of harm for participants
- Insider research can be an ethical minefield

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Early themes

- Gap between planning and implementation
 - Parallel discourses (we didn't / still don't understand each other)
 - Lack of understanding about roles, responsibilities, procedures
 - Mismatch between pedagogy and technology
 - Need for bridges/shared space
- Adaptation
 - Using the tool instead of it using us
 - Reactivity turning to proactivity
 - Concessions: inability to move, removing risky activities
 - Acceptance and resistance
- New perspectives about lectures/lecturers
 - Teaching as technical
 - Teaching as coordinating lecture venues
 - Teaching as performance (disconnection)
 - Rethinking "ownership" of the lecture
- Operating with chronic uncertainty
 - Loss of control
 - Psychological fatigue
- Role conflicts
 - Should academics be technicians?