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For the slides, references, etc. see: http://tiny.cc/2cc

Dundee eAssessment 5 Sept 2014



**Speaker: Sarah Honeychurch** 

# General intro points

Technology Agnostic

TodaysMeet





Speaker: Niall Barr



- Yet Another Classroom Response System Free, open source software being developed and piloted by University of Glasgow
- Works on smartphones, laptops etc. (no need to hand out "clickers")
- Guest access can be enabled

Speaker: Sarah Honeychurch

### Part 1: **Answers from the audience**

### Qu.1. Do you expect students in a lecture to give 100% attention to the speaker?

<u>Solo</u> First, answer this solo.

### In pairs

When you've sent in your first thought, then turn to a neighbour who has also sent in her/his first thought and discuss what you said. If you change your mind as the result of this, send that in

### Qu.2. Does that mean students musn't take notes?

If they take notes then that requires looking at what they are writing; and thinking about its meaning.

Please send in your first thought on this in a fairly short phrase.

When you've sent in your first thought, then turn to a neighbour who has also sent in her/his first thought and discuss what you each said. If you change your mind as the result of this, send that in too.

## Qu.3. How do you assess socially?

If we believe that peer interaction is important for learning, how do we assess for it?

Send in your points about this as open-ended texts. You can continue sending in thoughts on this as the talk progresses.

We will return to look at the points raised later in the talk.

# Reminder to carry on

Throughout the talk, carry on sending in both points about qu.3, and any other questions or points of interest.

**Speaker: Steve Draper** 

# Twitter in the classroom Peer interaction in parallel with the Teacher

The essential feature is that students are encouraged to be sending and sharing messages during class, during exposition by the teacher. This is a fundamental challenge to the egotism of the presenter. (After all, they are paying for it and it should be me me who delivers.)

The technology works at many scales; but our ability to scan / skim the channel may or may not scale up.

I tried it myself in a small way in one class last semester (next slide but one). Sarah supported me in this.

We were inspired by Graeme Pate's use of it (next slide).



### Our own classroom trial

In one class (27 enroled; 10 hours), I attempted to introduce Twitter as a second broadcast channel (independent of the first channel consisting of monologue by me in speech and slides).

Graeme Pate identifies 3 kinds of contribution on the 2<sup>nd</sup> channel:

- 1. "Linking": URLs or literature citations [7]
- "Reinforcing": elaborations [23]
   ("re-expressions" in the Laurillard model)
- "Questions": Q&A where a student posts a question and others may answer it. [9]

That is what we saw some of in this class

It's a way of getting peer interaction in the classroom; but also, of improving interaction (as opposed to only monologue) between L and T.

### A Model of how we should have done it perhaps

- "Lecture"
- · Pose question
- Students ponder individually
- · Discuss with neighbour (s)
- Reach consensus
- · One of pair (group) "tweets" answer
- Responses are collated
- Class discussion

archive-event-hashtags-and-visualize-conversation/ http://mashe.hawksey.info/2013/02/twitter-archivetagsv5/

· Sort by user to assign marks

### 2cc: The two channel classroom

I call this idea "the two channel classroom" (2cc).

- The traditional idea of a lecture is that T broadcasts, and Ls silently process that individually by writing paraphrased notes.
- Thus there is actually a second channel anyway, for any active learning to occur ⇒ I.e. attention can NOT be exclusively on T.
- The new feature is that this second channel might be broadcast: so that peers could share their active experience of the lecture in a way likely to promote learning, without interrupting channel 1. (Also, questions for T posted. cf. JITT)

Relative to unreflective standard practice, this is a sophisticated challenge to our concepts of what engagement can and should be; of what interaction should be; and of (my / any) simple division of teacher-learner interaction vs. peer interaction.

It also addresses what learners are actually doing in their minds during a lecture.

### 2cc (cont.)

- Learners are not (should not be) spending all their attention on receiving what teacher says, but half of it on processing it.
- Writing is the traditional way of doing mental (re-)processing.
- Modern technology means learners could share this writing if/ when it is useful to do so, without disrupting others' listening.
- What types of thinking might they thus do and share in class?

### What types of thinking might learners do/ share in class?

- Asking questions about what they don't understand [other students may answer. Teacher could address these later.]
- · Answering (other students') questions: learning by teaching.
- Searching the web to improve, fill in, the slides e.g. better diagrams, exact citations, additional citations [Sarah did this in my class]
- Paraphrasing, summarising, elaborating the material (all excellent exercises that generate understanding; but are also useful to self and others).
- Full lecture notes (how often do students request others' lecture notes?) [Sarah says YES.]

### **Brevity**

Just as technology may enforce brevity (e.g. Twitter), or not; so it is often learning-promoting to require it (or not) of learners. E.g. "Compose a single tweet that summarises your PhD thesis".

In a 2 channel classroom, students might take conventional notes (long), but share summaries; or share summaries and long versions separately so as to help the reader.

Brevity is good for chunking: for dividing material into chunks, and composing a phrase to stand for the long version. True in the human mind, true of most powerpoint (one bullet point takes 100? 500? words to speak to), true of paper abstracts, ....

### Fluent / fluid switches of audience

- Most software is designed for a single fixed idea about the audience; and that in turn means that you have to decide the audience before you type a character; but in fact what is wanted is for the writer to be able to change their selection of a target audience, a distribution list, at any moment. To "release" it in advance (cf. CCTV), after finishing typing (cf. email), or retrospectively (cf. forward email: database retrieval).
- And to turn anonymity on and off.
   Anonymous; a constant pseudonym; real name.
- The technology requirements point here is: we need better facilities so that each user can switch the audience for what they are writing moment by moment; retrospectively, prospectively, concurrently.
- We can already do this partially in some platforms e.g. you can filter twitter posts by author, by subject-tag, ...

### Fluent / fluid switches of audience (2)

- This is needed for a 2<sup>nd</sup> classroom channel (a mixture of private notes, instantly shared bits, retrospective selection of all one wrote, ....)
- It is needed in many applications to assessment: my draft just for me; what I submit to the teacher; letting the whole class see after submitting their own (e.g. you can't see others' work until you submit your own; then all are visible).
- It is needed in classroom "snowball" exercises, where a
  question is answered first individually on paper, then in pair
  discussion, then in fours, then in plenary. This traditional
  teaching method is not yet well supported in software.

### Solo / social constructivism

This issue of switching audiences at the level of typing words parallels, at the macro-pedagogical level, the muddle about solo/ social constructivism. We should:

- NOT say that solo learning is the best and main or only mode (tradition)
- NOT say that social learning is the best and main or only mode (new and ridiculous over-reacting opposite view; often labeled connectivism, social constructivism, rhizomatic, etc.)
- BUT wake up to the fact that Aristotle was right and the golden mean, not the extremes, is where virtue lies.
   Or to come forward two millennia (but not on any account nearer than the 19th century), we want the synthesis, and not the thesis nor the antithesis.
- => Best learning requires both solo thought and social discussion, interleaved.

### **Assessment**

Having a two channel classroom will also soon lead into (e-) assessment issues. Basically, they are the issues of assessing social and peer interaction, rather than of private, solo performances.

Giving marks for group work; and for participation.

Aided however by the recording that almost automatically comes with using digital support for the second channel.

### Assessment, specifically

- Marks for "participation" based on the digital record of the 2<sup>nd</sup> channel.
- · Contribution to discussion: responses, provocations
- Contributions to shared lecture notes
- Pre and post lecture: slide enhancements, citations
- · Answering other students' questions
- Merge this with jigsaw type learning designs: where the class is split into groups, each of which produces materials the whole class needs and will not get anywhere else. Assessment for this is like group work: assessment of material produced by each group.
- The complete automatically captured digital record is a great help here. Assessments no longer work useful only for producing a mark; but are socially used as well.

**Speaker: Sarah Honeychurch** 

Discussion from the 2<sup>nd</sup> channel

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### Wrap-up

# The headline messages

- If you accept constructivism as a fact, then students are already spending half their attention, not on the speaker, but on processing and understanding; most often expressed in writing.
- Are you going to use ICT to allow this to be shared amongst the class (with automatic benefits for solidarity, augmented learning)?
- The technology requirements point here is: we need better facilities so that each user can switch the audience for what they are writing moment by moment, retrospectively, prospectively, concurrently:

Fluent / fluid switches of audience in online thinking

 (E-)assessment too is strongly concerned with controlling the audience (e.g. you can't see others' work until you submit your own; then all are visible).

# A place to stop Programme of the slides, handout etc. see: http://www.psy.gla.ac.uk/~steve/talks/2cc.html