

# Too much information? Post lecture strategies

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# Presentation? Workshop?

- There were two options for these sessions. This one might not quite fit into these categories.
- My intention: outline some ideas and allow time for critical reflection and interaction.
- “Strategy”: Implies reacting to fluid developments.
- Today is a product of my participation in the GCETT, and teaching in secondary schools and at FedU, mostly in history.
- Prof Roy Tasker, Keynote address, ‘Day 2 Learning and Teaching Conference’ 2013, University of Ballarat, 5 July, 2013.

# Overload.

- Tasker discussed the average human capacity for short-term “working memory” as  $7 \pm 2$  “bits”.
- This fits with the common saying ““Wetware has 7 plus or minus 2 temporary registers.” (see Miller, 1956, or “Miller’s Law”)  
Wetware: the brain being mostly water, (The above applies to data you’re using to achieve a particular task.)
- More generally: even interested parties “drift off.”
- “Meditation”.
- Belief that the lecture is outmoded: certainly present in the GCETT cohort.
- Counterview: there are lectures for differing purposes, and there are means to ensure they meet their intended goals.

# Lectures.

- As an enduring resource: referenced, recorded, in a sense a 'text'.
- As a reflective and reactive dialogue. Responding to audience questions, perception of audience interest.
- Regardless, there is a problem associated with using the lecture purely as a source of *information*.
- Contention: they can serve to provide context to prior learning, and a source of *activation*: What to read into next.
- So if the lecture format is open to criticism as "trying to give students a drink from a fire hose" use it as a means to show them "where the water is".

Working on the assumption that traditional lectures are being used, what are some tactics, strategies or tools you might use to ensure the lecture succeeds as a learning aid?



One strategy is to ensure that the lecture (in whatever form it may take) is not merely a stream of facts but a discussion of key points which gives context to prior understanding, and serves to introduce a new topic for further exploration.

One tool might be post-lecture questionnaire, with a two-part intended purpose:

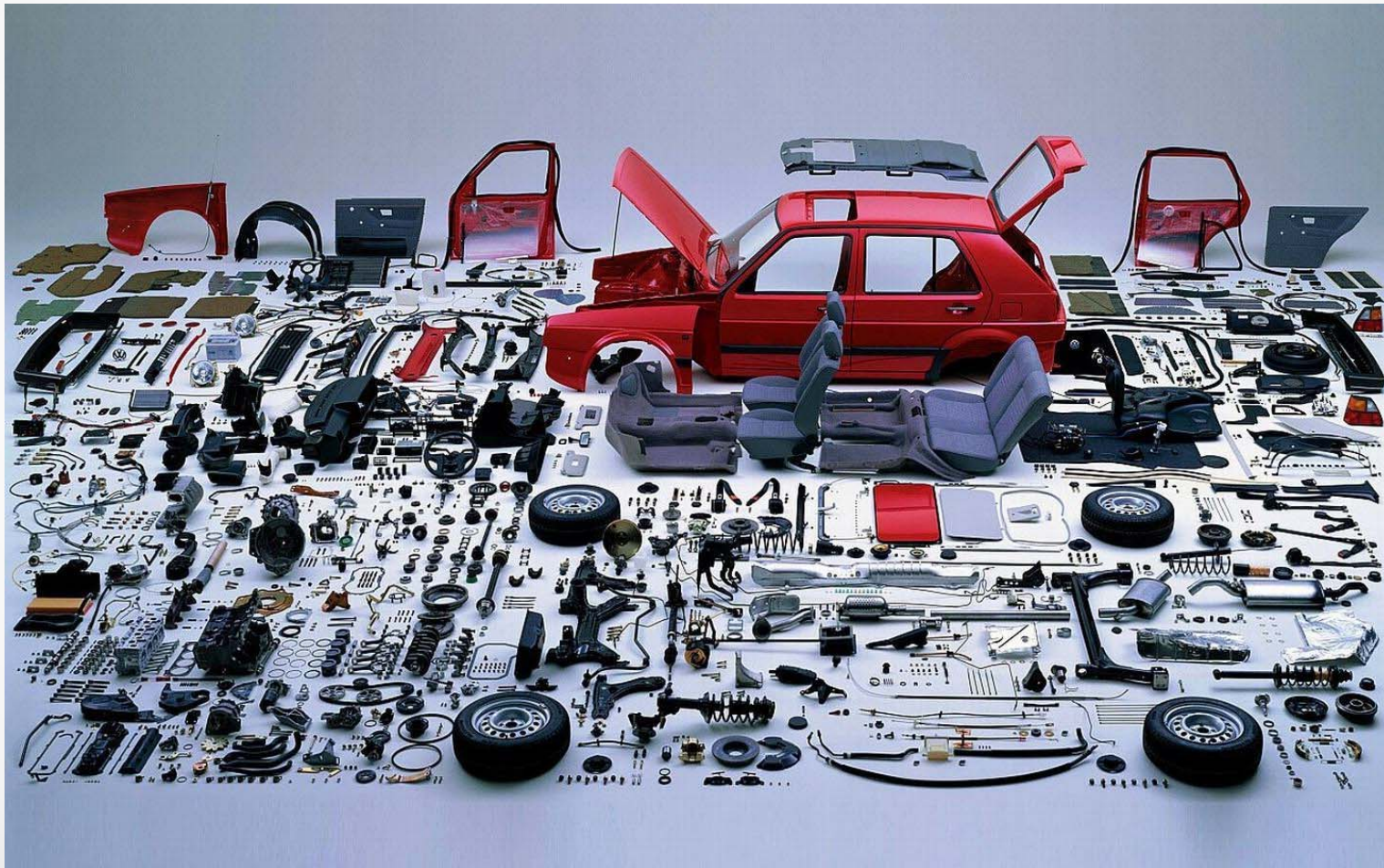
- 1) To aid students in viewing the lecture in its broader context
- 2) To gain data into how to modify future lectures to ensure they are as effective as possible.

# A work in progress (feedback welcome)

- 1) What is one key concept discussed in the lecture on which you will conduct further reading, and why?
- 2) Though I cannot offer guarantees due to time restrictions, which (if any) of the following tutorial exercises might help you better understand this topic? Tick as many as are applicable (insert list here)
- 3) Did the lecture touch on any issues about which you feel strongly? If so, what issue (or issues)?
- 4) Did the lecture expand on your prior knowledge on the subject, and if so, could you offer an example?
- 5) Considering that the slides/notes will be available on Moodle for review, do you think there was too much/too little material in today's lecture?



Pull that to bits, but please label the parts for future use!





# Rationale for the questions:

- 1) This is perhaps the key question: it reminds the students that not all the information comes from their teacher, and that they are highly involved in the learning process. Further, the responses will aid the teacher in identifying what aspects of the lecture content are the most difficult, confronting, or the most interesting.
- 2) This question serves as a means to take suggestions for suitable learning exercises and promote student reflection on how they learn new concepts and skills. It should be noted that the exercises that students enjoy the most may *not* always be the most beneficial ones.
- 3) This question aims to evaluate what issues and concepts elicit an emotive response. Tasker discussed how deliberate 'cognitive conflict' may be generated, where emotive examples are used to show the importance of fact-based content. The specific example Tasker discussed in his address was Anthropogenic Global Warming, and the underlying scientific principles of the greenhouse effect. By gauging which issues generate an emotive response, the teacher can adjust what descriptive examples they might employ.
- 4) This question serves both to further the teacher's understanding of how students view their prior learning, and generate reflection among the students as to how their existing understandings fit into the broader picture.
- 5) This question serves to gauge how the students feel about the amount of information contained in a lecture.

## Further reading and viewing:

Clark, D, (2010) Keynote address, 'Making sense of the sea change: the 2010 conference of the Association for Learning Technology', 7 September.

<https://www.youtube.com/watch?v=Tbl-xXF8NPY>

Miller, G, (1956) 'The magical number 7 plus or minus two: some limits in our capacity for processing information.' *Psychological Review*, 63, 2, 81–97.

Lutwakk, E, (1985) *Strategy and History*, New Brunswick, Transaction Books.

Tasker, R. (2013) Keynote address, 'Day 2 Learning and Teaching Conference' 2013, University of Ballarat, 5 July.

2013. <http://video.federation.edu.au/videos/1358/roy-tasker-learning-and-teaching-conference-2013>