List of issues (course topics) in the CERE course

This is a prompt about how to think of the course material as a whole. Here are some key issues in education, mentioned in the CERE course. The point is that there is a network of ideas, not a definitive list of mutually exclusive topics. You, the student, have to think about what overlaps with what, connects with what else. I have changed my mind over time about what the relationships really are between the issues. You can think two things are closer than they really are e.g. that you can't have a learner with a low Perry score i.e. black and white view, but a high Deep &Surface approach: wrong. You can think two things are unrelated e.g. the Laurillard model and motivation: but the "management layer" idea connects them.

So think of them as a network; and work out for yourself some of the main connections. Perhaps draw a mind map to show them.

List of issues / topics

- Feedback
- Chi 2008: paper on watching videos of tutorials
- Draper 09a: The "catalytic" suggestion about how both peer comments and brain teaser questions improve learning. Self-explanations. How we can learn from people without agreeing with them.
- Draper 09b: Different goals learners work to achieve; different interpretations of a piece of feedback
- Constructivism / Social Constructivism
- Big effects in education
- The three roles of a teacher
- The importance, or lack of it, of a teacher
- Contingent tutoring
- Laurillard model (and its three underlying "super-principles")
- Deep and surface learning
- Perry's model, and Belenky
- Reflection
- Interaction
- All the ways in which others may assist a learner (table; 4 binary dimensions)
- Learning as Participation (not Acquisition)
- Learner motivation (perhaps including expectancies; perhaps including pro-activeness)
- Expectation effects
- Read, discuss, write: the fundamental triad for studying?
- Peer interaction
- Misconceptions / prior conceptions / spontaneous conceptions.

Questions for each topic:

- 1. Which other issues is it strongly linked to, and why?
- 2. How to apply it to this course module?
- 3. How to apply it to the case of the maxi project (a final year individual research project)?
- 4. How to apply it to the case of the L3 statistics course?