

How (not) to construct ALN course questions that encourage student participation in peer collaboration/knowledge construction

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What do we know about how students learn ?

- The *sage on the stage* model of instruction is less effective than collaborative knowledge construction
- Professional best practice is socially constructed
- Learning is socially situated (Lave & Wenger, 1991)
- Learning goals should be clear and related to outcomes
- Deep learning requires iterative cycles of knowledge construction (Kolb 1984)

..but questions are questions surely, what is different about online settings ?

- Negotiating the meaning of a question may take several iterations
- 1 raised hand in class = 20 emails online
- Physical isolation leads to inertia – need peer thought leaders to generate momentum
- Greater potential for reflection and deeper debate over a longer time period, so let us exploit social knowledge construction.

Good , bad or average ?

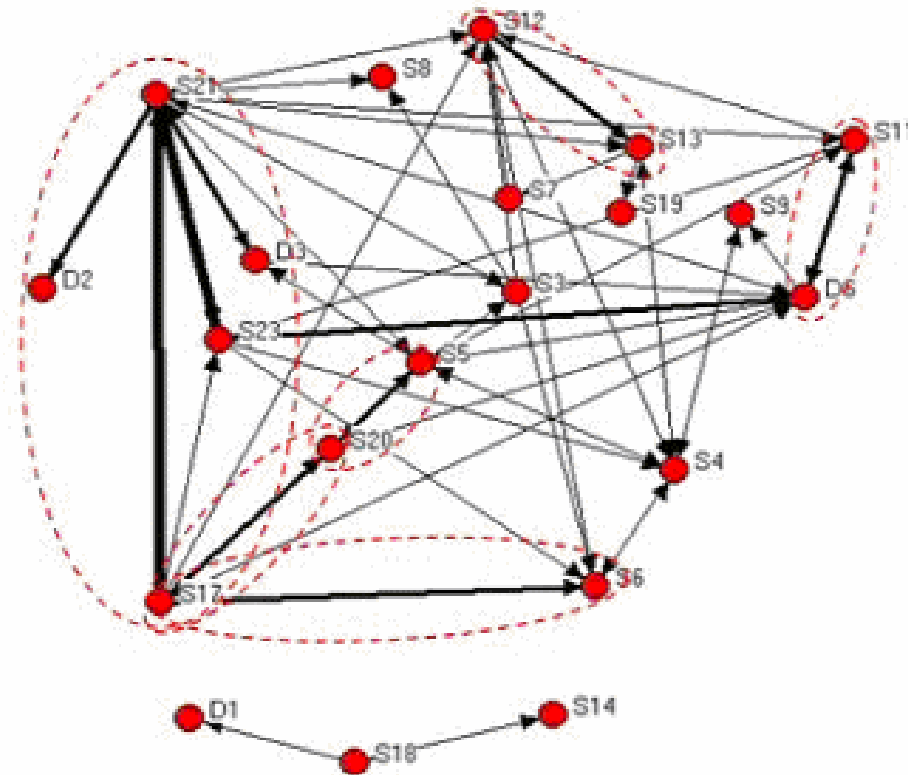
Question	Good	Average	Bad
<p>How do we plan to use IS, taking into account business pressures, organizational responses and supporting critical response activities? What are the most critical things to consider, in planning for IS? What issues and elements have caused you problems, because you failed to anticipate them? When discussing this, think especially on the distinction that I made between IT systems and Information Systems.</p>			
<p>Read: Carr, N. , 'IT Doesn't Matter' & Champy, J. 'Technology Doesn't Matter - but Only at Harvard' - I'd like your own insights and (informed) opinions about whether IT does matter.</p>			
<p>What type of Travel Industry firms do you think will survive, and which will dominate the travel industry in years to come? Why?. If you ran a travel agency, what would be your critical success factors for the future and how would you use IS to support these?</p>			
<p>Read: Peter Drucker: "The Next Information Revolution" and "Beyond The Information Revolution." I'd like to hear from you about: (i) what do you think are the main points that Peter Drucker is making and do you think he is right? (ii) Do you have any IS-related examples of these phenomena, from your own experience?</p>			
<p>How do we manage the chicken-and-egg situation of changing business processes vs. changing IS use?</p>			
<p>What are the technical problems of integrating information services and IT systems and can a corporate information or data portal solve some of these problems?</p>			

Good , bad or average II

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Good Question

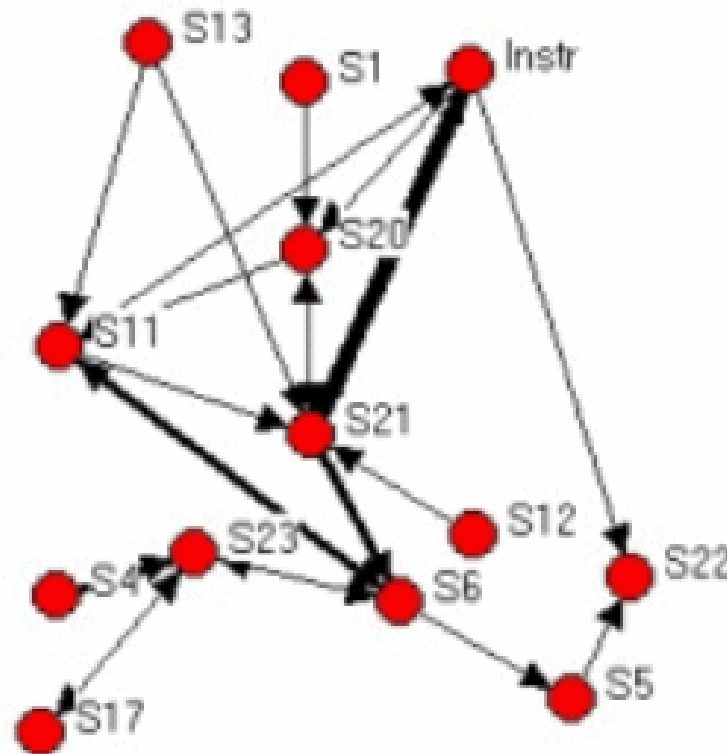
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Posts 108, Posters 21, No of sub-threads 13, Week 1: Question 1

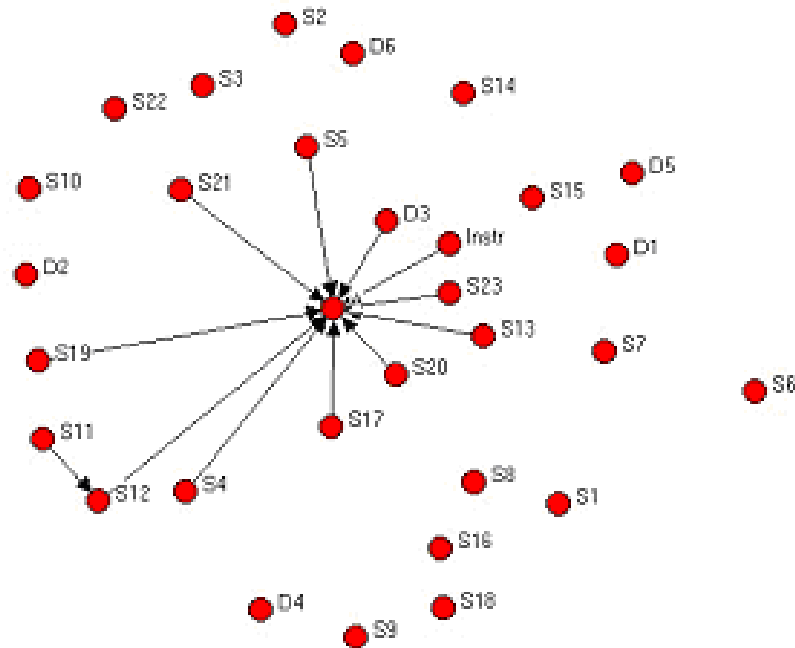
Average Question

What type of Travel Industry firms do you think will survive, and which will dominate the travel industry in years to come? Why?. If you ran a travel agency, what would be your critical success factors for the future and how would you use IS to support these?



Bad Question

How do we plan to use IS, taking into account business pressures, organizational responses and supporting critical response activities? What are the most critical things to consider, in planning for IS? What issues and elements have caused you problems, because you failed to anticipate them? When discussing this, think especially on the distinction that I made between IT systems and Information Systems.



Good questions tended to be

- First question in the week
- Early weeks better than later weeks
- Open questions (semi-structured) but bounded
- Permitted them to call upon their personal experience with IT in organizations
- Reflected a single domain learning goal
- Was relevant to students' professional career interests

Bad questions tended to be

- After a highly-interactive question
- Cognitively complex (containing multiple parts that needed to be considered in turn)
- Combined two or more unrelated learning goals – cross domain synthesis
- Students could not draw on personal or vicarious experience (professional work or related readings)
- Did not obviously relate to students' career interests
- Questions in later weeks were much less interactive and constructive than earlier weeks.

How to design a good question?

1. GOALS:

- Does the question structure relate clearly to course content (explicit knowledge domain learning goals as perceived by students) - i.e. what do they think they are there to learn?

2. DOMAIN:

- Does the question knowledge domain relate clearly to students' professional interests - i.e. does answering this question move them nearer to accomplishing their career/job goal?

3. EXPERTISE:

- Does the question knowledge domain draw on either (a) students' prior experience, or (b) students' vicarious experience (communicated through course readings or discussion) - i.e. do students have the expertise or experience to answer the question?

4. STRUCTURE:

- Does the question structure reflect a single knowledge domain, with a single problem-solving goal - i.e. is there a single problem to be solved (or a set of sub-problems relating to a single knowledge domain), or have you presented students with multiple, incompatible problems or knowledge domains to reconcile?

Role of thought-leaders in joint knowledge construction

- Specific individuals initiated and maintained social momentum in discussions
- These “Thought-Leaders” were central to sustained (deep) knowledge construction:
 - Tended to have in-depth, wide professional experience
 - Appeared to have previous online course or professional community experience (good social networkers)
 - Were reflective and interested debaters
 - Complicated and/or facilitated discussions.
- Contributions of thought-leaders appear central to vicarious learning – powerful complement to instructor resources.

Know your cohort

- Domain knowledge (Achilles tendon)
- Need to identify thought-leaders
 - Facilitation, moderation, reconciliation
 - Challenging
 - Social facilitation
- Balance between democratic debate, clique behavior and tumbleweeds
- Identification with group aims and behavior

Conclusions

- Try and draw on cohort's professional expertise
- Identify needs and professional interests of students
- Identify and encourage thought leaders early
 - Interfere when necessary, otherwise don't, but keep watching the skies
- Design open but bounded questions
- Provide strong background material for each question
- Identify clear learning goals (one per question)
- Be prepared to change the question if it is failing to engage students – students, like politicians may do this themselves ...