

March 24, 2015

STRUCTURING AND FACILITATING ONLINE DISCUSSION:
How can We Maximize the Power of Words in the Virtual Classroom?

Facilitators Notes:

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Background:

- Online teaching is increasingly important in higher education: it's here to stay.
- Experts tell us "Face-to-face teaching skills/pedagogy DO NOT transfer directly to the online format." Unfortunately, this warning is not enough to avoid doing it – akin to saying 'don't think about pink elephants'.
- So most of us wander into online teaching with the best of intentions but ill-prepared.
- Unskillful attempts at online teaching seriously impact both teacher and learner satisfaction.
- As such, the motivation for this session came from the organizers dissatisfaction with facilitating online discussions.

Objectives:

- During this session, we will explore the design elements of online discussions that can lead to positive outcomes for both students (e.g. learning, satisfaction) and faculty (e.g. efficacy, satisfaction).
- The primary objectives of this interactive session are to 1) generate a rich conversation regarding best practice in structuring and facilitating online discussion, and 2) provide a forum for cultivating individual relationships and a community of practice for educators focused on improving online discussions.
- The meta-framework for this session draws on the work of Alfred Rovai (2007) and is referenced in the handout.

Common problems

- "Even though online discussions provide substitutes for features of face-to-face instruction by eliciting responses to questions, they often lack the insight-producing spontaneity and continuous feedback of in-depth face-to-face interaction" (Darabai et al, 2011, p. 217).
- Common problems:
 - limited student participation (Hewitt, 2005);
 - inadequate critical analysis of peers' ideas (Rourke & Anderson, 2002); and
 - lack of motivation, commitment, and time, resulting in a failure to communicate effectively (Brooks & Jeong, 2006)
- "...online discussions should demand **cognitive collaboration** of learners, resulting in integration, synthesis and evaluation of discussion ideas. To accomplish this goal, strategies must be employed to allow learners to construct a **community of inquiry** through which they collaborate in a meaningful critical discourse requiring cognitive presence" (Darabi et al, 2011, p. 217).

The community of inquiry is seminal model in online learning. This approach suggests there are three elements to creating a successful learning experience (see Garrison, Anderson & Archer, 2010; deNoyelles, Mannheimer Zydney & Chen, 2014):

- **Social Presence** - ability of learners to project their personal characteristics into the community of inquiry, thereby presenting themselves as 'real people.'
- **Cognitive Presence** - the extent to which the participants in any particular configuration of a community of inquiry are able to construct meaning through sustained communication.
 - **Triggering event**
 "a state of dissonance or feeling of unease resulting from an experience" (Garrison et al, 2000, p. 98).
 "Here an issue, dilemma or problem is identified or recognized that emerges from experience. In an educational context the teacher often explicitly communicates expectations or tasks that become triggering events" (Garrison et al, 1999, p. 2).
 - **Exploration**
 "...a search for information, knowledge and alternatives that might help to make sense of the situation or problem... searching for clarification and attempting to orient one's attention" (Garrison et al, 2000, p. 98).
 "...participants shift between the private, reflective world of the individual and the social exploration of ideas" (Garrison et al, 1999, p. 2).
 - **Integration**
 "...integrating the information and knowledge into a coherent idea or concept...looking for insights and gaining some understanding of the acquired information and knowledge" (Garrison et al, 2000, p. 98).
 "...constructing meaning from the ideas generated in the exploratory phase. During the transition from the exploratory phase students will begin to assess the applicability of ideas in terms of how well they connect and describe the issue or event under consideration... This is the phase that is most difficult to detect from a teaching or research perspective. Evidence of the integration of ideas and the construction of meaning must be inferred from communication within the community of inquiry. This phase often requires active teaching presence to diagnose misconceptions, provide probing questions, comments, and additional information..." (Garrison et al, 1999, p. 2).
 - **Resolution**
 "...as an application of an idea or hypothesis. The success of the application and whether the idea is confirmed will determine whether the process of inquiry continues" (Garrison et al, 2000, p. 98).
 "The fourth phase is a resolution of the dilemma or problem posed by the triggering event, by means of direct or vicarious action. In the everyday world, this would mean implementing the proposed solution or testing the hypothesis by means of practical application. In an educational context, however, this is somewhat more difficult. It usually entails a vicarious test through thought experiments and consensus building within the community of inquiry" (Garrison et al, 1999, p. 98).
- **Teaching Presence** - design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educational worthwhile learning outcomes.

Creating effective online discussions, those that move students to deeper levels of cognitive presence, requires careful consideration to design (Rovai, 2007, p. 79):

- 1) Generate motivation for students to engage in productive discussions...
- 2) Describe the ground rules for online discussions at the start of the course...

- 3) Provide opportunities for socio-emotional discussions...
- 4) Create authentic content-and task-oriented discussions...

Generate extrinsic motivation for students by:

- Communicating the purpose of discussions in general, and specific discussions. For example:
 - In this discussion, the goal is for you to report in on your experience and/or understanding of....
 - In this discussion, the purpose is to generate discussion between participants and build meaning through engaging with different perspectives.
 - In this discussion, the purpose is to build community by sharing information about yourself, for you to enable others to see you as a complex and multi-dimensional person.
- Grade online discussions
 - The # of messages and the sense of community both increase when online discussions comprise 10-20% of grade. However, there appears to be no additional benefits beyond this (i.e.25-35%) (Rovai, 2003)
- Customize and contextualize discussions
 - Select appropriate group size for different task-discussions (i.e. dyad, small group, whole class).
 - *...approximately ten students is a reasonable estimate for the minimum critical mass ... At the opposite end of this continuum, 20– 30 students are the most for a single forum with active discussions* (Rovai, 2007, p 81).
 - Allow students to choose discussion topics.
 - Draw on diverse learner backgrounds and perspectives of a topic.

Describe the ground rules for online discussions

- Allow time for training students to participate and facilitate
- Don't assume self-efficacy
 - Contributing to generative online discussions, as opposed to reporting in, requires "learning a different form of communication" (Levy,2003, p. 102).
 - "In the same way instructors should not expect that students become successful team players just because they are assigned to teams... Careful planning needs to be put into the instructional activities, such as modeling online facilitation, being present in the discussions, as well as preparing students before they take the lead in the discussions" (Barran & Correia, 2009, p 358).
- Create a detailed rubric
 - Rovai (2007),
 - Vonderwell, Liang and Alderman (2007, p 314)

Provide opportunities for socio-emotional discussions...

- Sense of community → cognitive presence
- Ice-breaker conversations CRITICAL
 - at the beginning of the course
 - At the beginning of each class/week
- Specific areas: 'water cooler' or 'break room'
- The value of 'me too' comments

Create authentic content-and task-oriented discussions...

- Authentic = relevant
- Online discussions can take multiple forms. For example (Darabi et al 2011):
 - a. **Structured** - "...specific questions under different threads were supported by detailed discussion prompts...used this strategy to design discussion questions advancing students through the phases of cognitive presence in the context of the discussion task" (p. 220).
 - b. **Scaffolded** - Monitoring the discussion and raising "questions focusing on advancing the discussion towards a consensus among the group members on recommending an intervention" (p. 220).
 - c. **Debate** – students are "randomly assigned one of two positions, each arguing for or against the appropriateness of a given intervention. Learners in the proponent role would construct arguments in favour of the proposed solution. Through their debate, learners arguing against the given solution examined, compared, and contrasted alternative solutions while exposing their counterparts to the advantages and disadvantages for their position" (p. 220).
 - d. **Role Play** – "students had to assume the role of a professional in their field...were then instructed to perform the discussion task from the perspective of their particular roles, examining the options from the perspectives of the roles other learners had taken, as well as their own perspective" (p. 220).
- Great resource for thinking about different 'forms' of discussion:
<http://www.ion.uillinois.edu/resources/otai/>

Wrap-Up: Key questions for consideration when designing discussions:

- What is the objective of this discussion (ie learning? Interaction?)
- What is the best LEVEL of this discussion (ie student to student, whole class? Small group?)
- What structural support would assist this discussion (ie instructions? Parameters such as multiple deadlines for posts? Assigning specific roles to individual students?)

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Other Design Considerations from the Literature

(referred to but not formally presented in the session)

<p>Temporal orientation: Asynchronous vs Synchronous discussion</p>	<ul style="list-style-type: none"> - ROVAI et al 2007 (pg 78) Although asynchronous CMC has its strengths, such as reflective versus spontaneous discussion, Mason and Lockwood (1994) identify several potential weaknesses of these computer conferencing systems, such as an overwhelming number of messages to read, frequent domination of discussions by a small number of students, increased chance of misunderstandings, and reduced student motivation to interact. However, skillful facilitation of online discussions by the instructor can minimize and even eliminate these weaknesses. - Recommended to use a combination of synchronous and asynchronous -
<p>Length of Discussion Space: weekly to align with lecture vs longer</p>	<ul style="list-style-type: none"> - THOMAS 2002 (pg 353) - The online discussion forum was integrated into an existing undergraduate Environmental Studies course, and designed specifically to provide a virtual learning space in which students could engage in a conversational mode of learning towards higher order learning outcomes. Three discussion themes were run consecutively through the semester for a period of approximately five weeks each. These discussion themes did not attempt to elicit specific 'correct' responses from students, but rather outlined the major issues students were expected to explore in their discussions. Most importantly, the themes were designed to promote student discussion and were worded to promote students' critical reflection on issues central to the course of study. The online discussion was explicitly embedded within the programme of lectures and each theme reflected a specific segment of the course.
<p>Membership: dyad, team or whole class</p>	<ul style="list-style-type: none"> - ROVAI et al 2007 (pg 81-82) MacKnight (2000) lists several different ways to group students for task-oriented discussions, such as: small groups led by the instructor or designated student group leader, buzz groups (two people), case discussions, debating teams, jigsaw groups (members of groups break into subgroups and then go back and take the information they learned to their groups), and mock trials. Rice (1994) reports community size in virtual classrooms strongly influences learning activities. Too few members generate little interactions and too many members generate a sense of being overwhelmed. Rovai (2002) suggests exact numbers to guide community size are difficult to determine since the chemistry of the community is situational and varies with content area, instructor, and learners. Nonetheless, approximately ten students is a reasonable estimate for the minimum critical mass needed to promote good interactions. At the opposite end of this continuum, 20– 30 students are the most for a single forum with active discussions. Multiple group discussion forums should be used for larger class sizes.

	<ul style="list-style-type: none"> - Recommendation is to establish specific “conference rooms” - Elicit individual AND group postings
Technology: wiki, blogs, linear discussion threads	
Purpose: building social presence/community vs engagement with content	<ul style="list-style-type: none"> - ROVAI et al 2007 (pg 82) As a final point, discussions need to be structured so that students understand expectations. Students become confused or lose their interest when a discussion is ill-structured or there is no process designed to enhance their critical thinking (MacKnight, 2000). One way to convey structure to students is to provide a course gateway in the form of a Web page that orients students to the structures and routines of the course. For example, the routine for course discussions could be that the instructor starts each weekly discussion forum with a focus question or problem. Thereafter, the instructor raises questions that drive thinking, asking for clarification or elaboration (MacKnight, 2000). Different students can be appointed to facilitate weekly discussion forums and provide closure by summarizing the threaded discussions at the end of the week. - STODEL ET AL 2006 (pg 7) The data in this inquiry reflect a jumble of perceptions and expectations about what learners do in online discussions. Some commented that the discussion forums were used merely to report in and not as a medium of discussion. To some the discussions were too loose and drawn out. To others the discussions did not progress. At the same time, these learners seemed to value the reflective nature of the postings. Other researchers have encountered similar findings regarding learners' experiences with discussion forums. Thomas (2002) found an overall incoherence in online discussion in terms of "branching structure, the large proportion of messages that terminated branches, and the abstracted nature of student interaction" suggesting that "the online discussion forum does not promote the interactive dialogue of conversation, but rather leads students towards poorly interrelated monologues" (p. 361). Others, such as Pawan et al. (2003), have found parallel results. Levy (2003) noted that contributing to online discussions is often one of the most challenging aspects of online courses. It entails "learning a different form of communication" and sometimes can feel like "anything but a conversation" (Levy, p. 102). Although CMC tools are still evolving, current practices suggest that online communication can be disjointed as learners jump in and out of online discussions. Our data reveal the paradox of online communication in that it is more informal and more formal than F2F conversations; more frenetic and more reflective. Garrison et al. (2000) stated that the "extent to which cognitive presence is created and sustained is partly dependent upon how communication is restricted or encouraged by the medium" (p. 93). Our findings add to the research literature that highlights the contradictory and ambiguous nature of online discussions in an academic setting. Anagnostopoulos, Basmadjian, and McCrory (2005) asserted that within a F2F classroom teachers and students do not "expect to define social space and interactions . . . they expect to find their place within it" (p. 1699). This is in

	<p>contrast to online classes in which teachers and students may share few expectations and conventions. It seems learners in this inquiry had varying expectations of how the discussions fit into their learning path and therefore the usefulness of these forums to their learning. The findings suggest that for some learners their perceptions of the purpose of the discussions was merely a way of reporting in – a façade of participation. In contrast are lively online discussions that enhance, are an integral part of, and reflect learning. The findings encourage us to question whether these learners wanted to engage critically in online discussions and whether they regarded the discussion forums as the best venue for this type of dialogue. As Thomas (2002) noted: While the online discussion forum has become a ubiquitous element of Internet-supported flexible delivery of education, it is apparent that it might not be the best technology to support the interactive and collaborative processes essential to a conversational model of learning (p. 364). Critical thinking in an asynchronous text-based online learning environment is not necessarily reflected entirely in the postings. Certainly, findings in this inquiry suggest that learners engaged in critical thinking with other members of their triad offline. In addition, learners likely engaged in critical thinking in their own reflections, in dialogue with colleagues outside the course, and in their assignments. Garrison and Cleveland-Innes (2005) observed that students may be "cognitively present while not interacting or engaging overtly" (p. 144); for example, when vicariously following and reflecting on the discussion and constructing meaning individually. Moreover, the learners in this inquiry shared the careful nature in which many of their postings were constructed. They did not want to post something that might offend, they wanted to sound academic, they were excruciatingly aware of the permanence of whatever text they posted, and they did not feel fluent in the language of online dialogue. Given these concerns it is perhaps not surprising that the learners did not engage in a higher degree of critical thinking in the forums; its very nature demands an unpacking of assumptions and a willingness to expose personal beliefs, tease apart differences, and challenge assumptions. It is</p> <ul style="list-style-type: none"> - therefore problematic to equate the presence of critical thinking solely to what transpired in the discussion forums. Using the community of inquiry framework to interpret the findings in this inquiry elicited questions regarding the intentions of this particular online learning experience. Was it to create a collective community of inquiry; for the learners to engage in all four stages of the critical inquiry process? It seems the forums were used to build a sense of community in order to help learners achieve a level of critical thinking made evident in their individual papers. We also need to question who the "collective" is in an online experience: the whole class? the triads? Perhaps for some there is no collective.
<p>Who Facilitates: instructor vs students</p>	<ul style="list-style-type: none"> - Barran & Corria 2009 (pg 341) When looking at the importance of a teacher's presence in online learning environments, much of the research has focused on facilitation roles of instructors (Hara, Bonk, & Angeli, 2000; Zhu, 1998). For instance, when investigating the relationship between student perceptions of others in an online class, Russo and Benson (2005) found a significant correlation between students' perceptions of teacher presence and their satisfaction with learning. Therefore, instructors' moderation

	<p>has been identified as an important factor for effective online interaction (Hara et al., 2000; Zhu, 1998). Research also identified some of the shortcomings of instructor-led facilitation of online discussions. For example, instructors may not be able to fulfill all the facilitation responsibilities because of the high time commitment required (Rourke & Anderson, 2002). Managing a large discussion group online may be overwhelming. Although instructor-led discussions do not necessarily result in instructor-dominated discussion, having the instructor as the center of the discussion may create an ‘authoritarian presence’ (Rourke & Anderson, 2002, p. 4) not conducive to genuine conversations. Although in their community of inquiry model Garrison, Anderson, and Archer (2000) assigned most of the moderation activities to teachers, they acknowledged that teaching presence can also be achieved through a meaningful interaction among students. In this line of reasoning, facilitation is a shared responsibility among instructors and students, changing the traditional role of the instructor from having ‘total control of the teaching environment to sharing with the student as fellow learner’ and giving ‘more emphasis on students as autonomous, independent, self-motivated managers of their own time and learning process’ (Collins & Berge, 1996).</p> <p>- Encourage peer-to-peer communication</p> <p>Peer Facilitation:</p> <ul style="list-style-type: none"> - more popular with online students than instructor facilitation (Carreia & Davis, 2007) - length and number of postings increase (Poole, 2000) - three phase technique: introduction (establishing ground rules); engagement (giving opinions/experiences, questioning showing appreciation); and monitoring (suggesting new direction, summarizing, personally inviting people to contribute) (Hew & Cheung, 2008) <p>-</p>
<p>Example of Content/Task Discussion Design: KNOW-WANT-LEARN (Ogle, 1996) adapted by student and described in Baran and Correia 2009 (pgs 348-350)</p>	<p>What do you KNOW? (Acknowledging what people know before they read the text) What do you WANT to know? What did you LEARN?</p>
<p>Example of Content/Task Discussion Design: TRIAD PROTOCOL (Mannheimer 2001, p21-22)</p>	<p>Round 1: A presents his or her work in progress. Meanwhile, b serves as discussant, building on the presentation with comments, questions, and suggestions. And C serves as observer, listening carefully, saying mothering, and taking notes. After A and B have talked, C summarizes and adds a concluding comment. Round 2: Here, B presents, while C discusses, and A observes. Round 3: C presents, A discusses, and B observes</p> <p>Finish with a debriefing – reporting back to the larger group? For example, asking the triad to report back with one special thing they want to share about being a presenter, discussant or observer.</p>
<p>Train online students HOW to have online discussions</p>	<p>Baran & Correia (2009, p 358) ...they were not simply expected to know how to facilitate discussions and take a leadership role. In the same way instructors should not expect that students become successful team players just because they are assigned to teams.</p>

	<p>The design of online discussion activities requires a thorough learner and needs analysis designing the online activities to target learners' needs, expectations, and constraints. Careful planning needs to be put into the instructional activities, such as modeling online facilitation, being present in the discussions, as well as preparing students before they take the lead in the discussions.</p>
<p>Example of Content/Task Discussion Design: ORIGINAL EXAMPLE AND VALUE ADDED COMMENTS (Mannheimer 2001, p21-22)</p>	<p>The effect of having two deadlines – one in which initial comments were due before peer comments. Statistical differences appeared (Herrick et al 2011)</p>