Best Practices In Asynchronous Online Course Discussions

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Abstract

Along with an increasing number of online courses offered via the Internet, online discussions have become a ubiquitous component in such courses. With the increased use of online discussions comes a corresponding need for the discussions to be of high quality. Online discussions need to be structured so that they are positive communication and learning environments. New online instructors often struggle knowing just what the proper "structure" really is. In order to assist instructors realize what works best in online discussions, this study sought to find best practice suggestions regarding discussions in asynchronous online courses. These best practices were culled from the literature and from the author's personal experiences in teaching some 60 online courses.

INTRODUCTION

nline learning (OL)enrollments in Institutions of Higher Education (IHEs) are growing. One count had 750,000 students enrolled in distance education courses in 1994-5 (Lewis, Farris, Snow, & Levin,1999). That number has risen markedly in the past 10 years. The 2005 Sloan Consortium (Sloan-C) annual survey of online learning in IHEs found that the number of students taking at least one online course is now over two million, with over 2.3 million total students in Fall 2004. Overall online enrollment increased from 1,971,397 in Fall 2003 to 2,329,783 for Fall 2004. The number of new students added to those studying online matched the number added for the previous year (around 360,000 in both cases). (Allen & Seaman, 2005, p. 10)

The 2005 Sloan-C survey figures indicate that the online enrollment growth rate is 18.2%, which is over ten times that projected by the National Center for Education Statistics for the entire postsecondary student population. However, although online learning is becoming more accepted and used by more faculty members as demonstrated by the increasing student enrollments, "online education is still in a highly preliminary stage regardless of its extensive acceptance in many fields or disciplines in higher education" (Su, Bonk, Magjuka, Liu, & Lee, 2005, p. 6).

In order to increase the acceptance of online courses, IHE instructors might be well advised to rely on proven practices when making the transition from face-to-face courses to OL.

It is conceivable that faculty members will attempt to build up from their traditional teaching experiences, especially when there is lack of practical guidance on how to carry out online instruction. As much as one might encourage instructors to be creative and transformative, such innovations take time to develop. People often feel comfortable building upon what they are familiar with instead of starting out creative. While such transitional stage from transfer to transformation is understandable, organizations should look for the best practices to help shorten this transitional process. (Su, Bonk, Magjuka, Liu, & Lee, 2005, p. 6)

A major component in most online courses, especially asynchronous online courses, is the discussion area. This paper contains best practice suggestions for doing online discussions. These suggestions are drawn from research in the field coupled with the personal online teaching experience of the author. If the suggestions are followed, OL course discussions should have enhanced quality and student satisfaction, which in turn could improve overall acceptance of OL in IHE.

LITERATURE REVIEW

Online Learning. Distance learning traditionally has referred to instructional programs in which students and their instructors are separated by time and/or physical location. Senanayake, Liyanege, and Dadigamuwa (2005) view distance learning as "prepackaged text, audio, and/or video courses taken by an isolated learner with limited interaction with an instructor or other students" (http://www.itdl.org/Journal/Jun_05/article07.htm). Willis (2001) believed that "at its most basic level, distance education takes place when a teacher and student(s) are separated by physical distance and technology (i.e., voice, video, data, and print), often in concert with face-to-face communications, is used to bridge the instructional gap" (p. 1). Online learning, including asynchronous learning, is a subset of distance learning.

Online learning is generally regarded as an overarching term used to describe education or training that occurs via the Internet (i.e., online). Online courses are defined in the Sloan-C surveys as having at least 80% of the course content delivered online (i.e., over the Internet). The combination of two of the classifications listed below (traditional and web facilitated) is used as the definition of "face-to-face" instruction (in other words, a course with zero to 29% of the content delivered online) The remaining alternative, blended courses (sometimes called hybrid courses) are defined as having between 30% and 80% of the course content delivered online. (Allen & Seaman, 2005, p. 4)

Think of a continuum with one end being the traditional face-to-face (F2F) classroom where the instruction is delivered by the instructor while in the physical presence of his/her students. The other end of the continuum would be online learning that is delivered 100% over the Internet (i.e., without any F2F instructor-student contact). Hybrid or blended online courses would be somewhere on the continuum between the two extremes, combing F2F instruction with online teaching in that some of the instruction is F2F and some instruction is in cyberspace over the Internet.

Online learning in this study further refers to asynchronous learning in which the learning is 24/7, not having any specified online meeting times (e.g., no virtual chat sessions or real-time instructor lectures). The students participate in the course from any location in the world using an Internet connection. This increased access and flexibility is one of the advantages in taking an online course. The online courses referenced in this study are not "live" nor are they "canned." There is constant posting and replying within specified timeframes (usually a week in the researcher's courses) to specified questions and/or situations related to the coursework at hand.

Online Discussions. Many online courses incorporate student participation in discussions, commonly referred to as discussion boards or forums. In fact, the online discussion board or forum has become almost a ubiquitous element in online learning courses. Active participation is an ongoing formative assessment that the student is keeping up with the course activities (Edelstein & Edwards, 2002). The threaded discussion format used by most online course management systems, such as BlackBoard and WebCT, typically is set up so that the interchange of discussion postings and replies are grouped in the same location, often with subsequent postings in response to earlier postings being directly beneath the earlier ones and indented to the right. The instructor may raise some discussion questions or post situations requiring thought and response from students who respond to the instructor's questions and scenarios and also respond to each other. Discussion topics correspond with the online course assigned readings for each week. "Students are asked to respond to one or two open ended questions designed to elicit discussion about the topics" (Markel, 2001). Conversation interchanges typically "occur between two or more people. 'Threads' allow the reader follow the various contributions to the discussion and respond to specific messages" (http://www.pitt.edu/~ciddeweb/FACULTY-DEVELOPMENT/FDS/threaded.html). As an inducement to use online discussions, "students can respond at their own pace, they are not intimidated by the immediacy of a classroom real time discussion, and they have access to instructor and peer comments" (Peters, 2000). Bhattacharaya (1999) found that learners preferred asynchronous discussion as a "discussion platform as it gave them better opportunity to concretize their thought before responding to the collaborating group members" (p. 100). The students had time to read and reflect before creating and submitting their replies. Perhaps as a result, students seem to like online discussions. Black (2005) found:

Over the past 6 years, I have solicited feedback regarding asynchronous discussion in the form of brief surveys given to my students in the online courses I have taught. These are graduate education students, most of whom are practicing teachers. A total of 92 graduate students were surveyed and responded over six semesters. An overwhelming 95% of the students responded positively to the use of asynchronous discussion as a forum for discussion. For these reasons and others, in many cases the richness of threaded discussions surpasses that of F2F classroom discussions. (http://www.citejournal.org/vol5/iss1/languagearts/article1.cfm)

Being part of an asynchronous online course, an online discussion is not set in a specific time or space – students can access the course and its discussions at any time from any computer with Internet access. "A successful online discussion has the same synergistic effect of group or in-class discussion, in which students build on one another's perspectives to gain a deeper understanding of the materials" (http://www.dartmouth.edu/~webteach/articles/discussion.html).

BEST PRACTICES IN ONLINE DISCUSSIONS

Having faculty who use best practices in setting up and facilitating online discussions is viewed as important in having successful online courses (Gerber, Scott, Clements, & Sarama, 2005). "There was a high consensus among the respondents [online instructors] concerning the importance of using asynchronous discussion in online courses. Eighty-five percent of them perceived it as the most important or very important" (Liu, p. 28). Schifter (2004) found instructor participation is a prerequisite for successful online programs. Thomas (2002) concluded that the "important role of a tutor or moderator in an online discussion cannot be underestimated" (p. 363). So if online discussion facilitators are so important, then what are commonly accepted "best practices" for instructors using asynchronous online discussions?

Structure. Students in courses that have online discussions need to be active participants. Student participation is important not only for collaborative idea sharing, but also to be "visible" in the course. In a F2F classroom, the instructor can scan the classroom and take attendance. But in a cyber classroom discussion there is no physical presence, other than the discernable presence offered by the students' written responses. Students, who are not active participants in the online discussions, effectively do not exist (Black, 2005). So if student participation is a critical factor, how do instructors engender maximum participation? Instructors would be well advised to structure their online discussions along proven best practices.

Black (2005) advises instructors to be very specific in their course expectations. She requires students to post so that "five responses occur over a period of 6 days or more" http://www.citejournal.org/vol5/iss1/languagearts/article1.cfm). She finds such a time frame to be important as without it, there are students who submit all their responses the last possible day (or even hour), and such late postings dramatically reduce the likelihood that anyone will read them, let alone reply to them. She likens last minute postings as akin "to coming to class when everyone else has left the room" (Black, 2005, http://www.citejournal.org/vol5/iss1/languagearts/article1.cfm). Her recommendations for "good discussion" stem from her own experience and include:

- Specific guidelines, checklists, and rubrics regarding acceptable responses.
- Modeling of what constitutes a "reflective piece."
- Well-designed open-ended questions and topics to provide a context for the discussion and to help students stay centered. (I have students create them, and I approve them, usually editing or adding something.)
- Requirement of specific connections made to the readings. (In this way, I am able to get students to pay attention to important people and ideas noted in the text and journal articles.)
- Private note to students who are inappropriate or off topic with their talk.
- Summary or wrap up of the discussion by the instructor or students.
- Accountability. (I assign one quarter to one fifth of students' total grade to their responses online.) (Black, 2005, http://www.citejournal.org/vol5/iss1/languagearts/article1.cfm)

Ambrose (2001) suggests the instructor make "students feel welcome and safe. This safety encourages members of the learning community to enter into discussions openly and honestly and to receive feedback that will

enhance their learning. They must entice all participants to enter into the discussions regularly" (Ambrose, 2001, http://flexiblelearning.net.au/leaders/fl_leaders/fll00/lyn_ambrose.htm). Ambrose, reporting on her personal experience as an online student herself, further states that online instructors

- must deliberately not respond to every comment and they cannot feel responsible for *holding up* the discussion. They are responsible for maintaining clarity of the discussion's direction and continually sharpening its focus. They should provide clear instructions on how and where to post messages and give general navigation techniques which will make it easier for participants to move around the virtual learning environment. They are keepers of coherence.
- be good listeners and needed to know when [emphasis from author] and when not [emphasis from author] to intervene in the learners' discussion. It would have been detrimental to our own knowledge building if the e-moderators had intervened when we were actively exploring and discussing each others views and experiences. E-moderators should only intervene when they need to help participants dig deeper i.e. when a discussion just scapes the surface. They also need to be able to summarise discussions effectively.
- be able to assess the learner's performance based on their evaluation of the learner's contribution to the online discussions. *People skills* [emphasis from author] are as important online as they are off-line. Investigating how to use humour effectively online prompted some of us to dig out our emotion dictionaries.

Klemm (1998) has numerous ways to turn passive student "lurkers" (reading but not posting) into active contributing participants in online discussions.

- Require participation. Don't let it be optional. Set aside a portion of the grade allocation for participation in the online discussions. Tell the students that they must post x-number of items each week or for each topic. Critics will say that this approach does nothing to ensure quality of input. But it at least gets the students engaged, and hopefully, once they get caught up in the activity, they will strive to improve the relevance and quality of their work, because now they are on display. No longer can they hide. For many students, it is more embarrassing to make public postings that have no value. As another incentive for quality work, the teacher should grade on quality of the postings. That is highly subjective, but no more so than grading of term papers or essays.
- Make the activity interesting. If it is a discussion topic, make it one that students have a reason to get engaged in. Appeal to their life experiences, vested interests and ambitions. It might even be a good idea to let the students create some of the topics, especially if you provide an overall academic framework to guide them where you want them to go. If it is a group-created paper or project, let the students pick the subject within the bounds of the academic objectives.
- Don't settle for just opinions. Everybody has opinions. They are like knee jerk reflexes, occurring with little thought once they have been formed. Thus, it is not surprising that many classroom discussion groups online are dominated by opinion messages, rather than rigorous analysis and creative thought. Teachers should insist that opinions alone are not sufficient. They must be supported with data and rational discourse and even re-examined in light of what others in the online group are thinking.
- Structure the activity. Give students guideposts to help them think of things to say that are academically meaningful. Choice of topics has a great deal of influence here. Topics should be organized around an academic theme that serves course objectives. Topics should not be so open-ended that students digress. You can go further by creating activities that are best performed in a structured way. For example, debates can be structured by requiring students to post a position, to which others respond with pro or con supporting arguments, followed by critique of the arguments. Or brainstorming can be structured by having students first generate a list of alternatives; re-think the list by creating new ordering, structure, or relationships, systematically evaluating each item to produce a "short list" of viable alternatives; and then reaching consensus decision on the best choices, followed by prioritization.
- Know what you are looking for and involve yourself to help make it happen. Irrespective of the specific learning activity, the teacher should know what quality work is and should intervene as the work is being developed to steer students in the right direction. When the teacher participates in a conference, providing extensive critique, feedback, and encouragement, students cannot help but become more involved.

• Peer grading. Tell students at the beginning of the conference that at the end of the activity they will be asked to rate each other on the value of each person's contribution. This can be a powerful incentive for students to do quality work in the conference. However, most of the students that I encounter do not like to grade each other. This is especially a problem if they have bonded as a result of operating in a learning team. (http://www.thejournal.com/magazine/vault/A1997.cfm)

Online instructors and students at Ohio State University have set up a Web site with their own advice in using online discussions.

- The decision to use electronic class discussion should be linked to course goals. One instructor said, "I think you have to have in mind why you are using the list and a vision of what you want it to become." Another said, "It should not be tangential to the course." Instructors and students recommended linking the electronic discussion to things that occur in the classroom setting by referencing points made in the discussion, linking assignments to class activities, and the like.
- An explicit orientation to the notion of electronic class discussion should be provided.
- Instructors should only use electronic class discussions if they are comfortable with technology. Several recommended being part of a listserver first or doing a trial run in advance of the course. One instructor mentioned that it would be good to have a partner who has used this form of teaching before. Instructors also emphasized the time commitment. One suggested, "Don't do it at a time when you're teaching another new course. There's lots to learn-technically, conceptually, philosophically, pedagogically."
- Instructors and students alike pointed out that the instructor needs to be willing to put in the time needed for being a good facilitator. Students recommended that instructors maintain a balance between enough structure to ensure order and civility but not so much as to dominate student discussion...The students and faculty suggested that instructors emphasize good netiquette and model it themselves. The instructor should also structure the list. As one said, "You can't just say, 'Write about something.' It has to be an assignment. [The students] have to feel it's important."
- Students called for more direct help in getting started with electronic discussion. First of all, instructors should make sure that all have access to the computers, modems, and software that they need. Distributing lists of computer labs and their hours was suggested. Several instructors also mentioned that faculty must be ready to provide this instruction themselves or should link students with peers or with technical support staff. A few students mentioned that printed instructions or taking the class to a computer lab for a first class session on learning the system would be helpful.
- Although some students resented requirements for a certain number of postings, most frequently because they felt that they did not have anything to say, most recommended that instructors require participation in some way...Several students called for an explicit grading rubric as well. They recommend that instructors specify how their contributions will be evaluated.
- Students recommended that instructors limit the number of messages to a reasonable amount. They would like this number to be set based upon class size so that students do not receive an inordinate number of messages. One student suggested that when class sizes are large, separate discussion lists be set up for subsections of the class to keep the numbers down. (http://ftad.osu.edu/Publications/elecdisc/ pages/tip.htm)

Also contributing tips for improving online discussions is a college administrator and frequent contributor to the field of online learning. Brown (2002) sees considerable common ground between F2F and OL courses. "Whether teaching face-to-face or at a distance, building community is a key ingredient for successful teaching and learning" (p. 9). Some of his other advice includes:

- Use online discussions to build a community. Maintain an informal tone.
- Relate online discussions to what is happening in class. Refer in class to issues raised in the discussion. Or, when many students still want to ask a question, extend the conversation online.
- Structure the discussion topic; focus it around a problem to be solved. Consider charging a specific student to propose a solution, and expect other students (perhaps a subgroup of the entire class) to refine the idea.
- Define roles for various discussants. Roles might be "original proposer," "idea extender," "constructive critic," "responder to critic," or "consolidator."

- Clarify the pay off for participation in the discussion, either by enhancing one's grade or by enhancing one's understanding of material that is likely to be on a graded exam.
- Outlaw "just opinions." Insist that points be backed by references to readings, other discussants, or other source materials.
- Keep a discussion board as a "for fun" place where students can post anything they wish as a means of letting other students know them better. (p. 9)

The TLT @ SUNY Program (Teaching, Learning, and Technology at State University at New York) provides additional insight into online discussions. The SUNY Learning Network (SLN) is the State University of New York's online education program with more than 100,000 enrollments annually. This writer has taught 15 online SLN courses.

- Require participation. Communicate expectations as to acceptable quality and quantity of participation. For example, students may be required to respond to the question you (or another student) poses and to the responses of at least two other students. You may wish to provide guidelines regarding quality as well. This may be as simple as pointing out that "I agree" is not a substantive comment in an online discussion. Or you may provide criteria regarding how students should support their opinions with reference to readings, research or other course materials.
- Include a grade for participation. Be clear about how students can succeed in discussion with reference to quality and quantity guidelines as well as requirements for timeliness. Entering an asynchronous discussion after it is nearly over can be unproductive (though there are ways around this problem such as asking a late student to summarize the discussion that has already occurred.)
- Provide an overview of what is due for each week. This weekly agenda will help keep students working as a cohort and ensure a "critical mass" for getting discussions off the ground.
- Make the discussion interesting. Asking students to respond to "known answer" questions is unlikely to generate sustained involvement. Discussion questions should be open-ended, focused on learning objectives and likely to spur some controversy or interaction.
- Participate wisely: The instructor should not dominate the discussion. Nor should he or she be absent. It is your job to keep the discussion on track by guiding without "pontificating". Frequently an instructor will provide a comment that students perceive as the "official answer" and discussion can come to a grinding halt.
- Require a product which is based on or the result of discussion: A "hand-in" assignment that is based on class discussion can help students to synthesize, integrate and apply what has been discussed.
- Keep your tone clear, concise and conversational. Avoid "academese", colloquialisms, acronyms, slang and abbreviations. Precise language and complete sentences provide good models for your students and encourage appropriate participation.
- Structure the discussion. Topics should not be too open-ended or students may lose focus. One way to structure discussion is through debates. Assigning or asking students to choose a position in advance can be helpful. Other structuring devices include problem solving, case studies, interviews, panels, brainstorming, summaries, etc.
- Have students lead the discussion. Assign students to post focused, topic relevant discussion questions and lead the discussion. It may be necessary to model a few discussions in advance and/or assist the student to choose appropriate discussion questions in the early stages.
- Include ideas, and information generated in discussion on exams. This serves two purposes. It reinforces the importance of student collaboration and makes "cheating" much more difficult. If students need to participate in class discussions to answer exam questions they will be unable to simply "copy" from outside sources.
- Form Small Groups or Learning Teams. Assigning students to these (rather that allowing self selection) can help avoid logistical problems that inhibit productivity. If you do allow self selection, establish a deadline for this process (a week to ten days) and then default to teacher assignment to the groups after the deadline.
- Make sure discussions are of a long enough duration to allow full and thoughtful participation. Ten days to two weeks is often required to fully flesh out an online asynchronous discussion.
- Deal with unacceptable behavior via private email. Include policies on unacceptable behavior in syllabus and orientation materials.

• Be encouraging, supportive, timely, and constructive in all discussions and all evaluations of the products of discussions. Promote quality participation by publicly acknowledging it. Ask for more detail from students who submit incomplete or shallow comments, but do this in a constructive and supportive manner. (http://tlt.suny.edu/discussion.htm)

Bolloju and Davison (2003) were instructors in a semester long undergraduate "Enterprise-wide Networking" class with 161 students. The instructors took a blended approach with a two-hour lecture and one-hour lab session. Students also used a Web-based discussion board outside of their F2F class meetings. Topics and subtopics in the online discussions were made available that aligned with various lecture presentations and several lab sessions. The instructors' suggestions for online discussions come from their own experience in running discussion boards in numerous courses and from their students' thoughts gotten through focus group sessions. Among their recommendations are:

- Guidance: Give illustrative guidelines on message structure (message subject, length of the body, contribution of the message) and on how to start new threads and append to existing threads. Most students do not bother to select an appropriate message title for their postings; they just use the default message title which happens to be the title of the message they are responding to. Selecting appropriate message titles for such messages helps other readers in understanding the substance of the discussion.
- Communication: Communicate expectations and rules of the game (frequency of instructors'/tutors' participation; expected number of postings from each student during the semester; how participation is rewarded; etc.)
- Initiate: Initiate a few threads (under the first couple of topics) to start the discussions. Despite all the guidance and communication, most students require further help, encouragement, and pressure. Destructive criticism of early postings will negatively affect participation. Therefore, it is essential that feedback is positive and constructive.
- Monitor and control: Monitor participation patterns and any sudden drop in interest. Cut off irrelevant threads with justification. Post participation scores or grades (e.g., list of top 10 contributors based on the quality of contributions made) on a regular basis.
- Praise and Caution: Commend messages that are interesting and useful for discussion but also send warnings or cautions through direct email to specific students.
- Anonymous postings: Allow anonymous postings selectively and occasionally (either in the first couple weeks and/or on specific threads—for example to collect feedback).
- Summarize threads: Close threads with summaries at an appropriate time. Students often complain that they are not certain about the correctness of comments and/or solutions offered by other students. Drafting the summaries could be delegated to student teams, but confirmation and endorsement of their content by the instructor is essential. (http://www.elearnmag.org/subpage.cfm?section=tutorials&article=12-1)

Hammond (2005) reviewed a selection of recent case studies that reported on integrating asynchronous online discussions in higher education courses. He found that there seemed to be consensus on certain aspects of online discussions. These aspects included:

- Curriculum designers should encourage formative peer assessment; provide summative assessment of process and credit for participation; provide summative assessment of group products; make group work and problem-based learning explicit in learning outcomes; require a minimum level of participation; set explicit tasks (e.g., discussion of cases, readings, or shared events); build in review of group work process; adjust workload to allow time for discussion; make conceptual learning and higher order reasoning explicit and appropriate learning outcomes; build in appearances of online guests; and rotate roles within the group.
- Instructors should draw on past experience but appreciate the unique features of the online environment; show teaching presence but encourage critique and divergence; fade as appropriate; have an administrative role (e.g., notify students of assessment arrangements); have a pastoral role (e.g., identify and support nonparticipants); be aware of their pedagogic role (e.g., respond where appropriate); suggest activities and roles to generate debate; and take responsibility for monitoring the nature and scope of discussion and group processes.

- Learners should have knowledge, experience, and understanding of the benefits of group work; be confident in and have some level of proficiency in ICT [information and communications technology]; have access to ICT; not be able to easily meet face-to-face; be ready to critique the authority of the tutor; find that text-based communication suits preferred learning style; have proactively chosen to take part; be confident in contributing to public forums and ready to constructively critique other points of view; be proficient in language of the forum and fluent writers; and be aware of an information gap and eager to cross it.
- Software should allow permanent storage and threading of messages; be robust and provide reliable access to messages; be intuitive, easy to use, and offer good visual representation; and enable files to be easily attached and downloaded. (p. 18)

Based on observations in some 60 online courses that included online discussion components, this writer offers these thoughts, which are in addition to and/or supportive of the other included recommendations in this study.

- To increase the number of students reading an instructor's postings start by using an enticing subject line/header. The instructor's postings in discussions are not always read. Out of a class of 25 to 30 online students, there might be only seven or eight students who click on the instructor's reply to read it. It can be a big day when more than half the class reads what an instructor posts to a student's posting.
- When there are three to five discussions going at once, it is likely that there will be more discussion (i.e., more student postings) in the discussions that are listed first. Without built-in safeguards in the form of course requirements (e.g., students must post in every discussion) student interest seems to dissipate with the later discussions. So if there is an important discussion in which an instructor wants to have a lot of discussion, that discussion probably should be listed at the beginning or the top of the discussions to increase the probability that more students will participate more often.
- Student participation as judged by their discussion postings varies during the course. Without having a requirement to post a certain number of discussion entries within a forced distribution (e.g., post entries in at least five of seven days) or without having requirements for a minimum number of postings by a given deadline (e.g., within seven days of a new discussion starting) usually results in a predictable pattern. After a discussion time period ended and a new one began, student postings drop down to low levels. Then the postings pick up later in the time period, especially as the time period nears its end. Without controls to prevent it, when the online discussions last a week, instructors can expect as much as 50% or more of the postings to occur in the last day or two of the week, especially the last day. Why is that? One reason is that students procrastinate. Also, if there is assigned reading, students might feel an obligation to do that reading prior to participating in the discussions, whether the discussions have any direct relevance to that reading or not. Thomas (2002) found that "as the number of messages increased, the number of hits [the total reading, navigating and message composition activity] proportionately decreased. This indicates that students were engaging in less exploratory activity within the online discussion forum and reading fewer messages before contributing" (p. 356).
- Some students need some external self-motivation. While many students are self-motivated and need little extra "push" to meet discussion objectives, there are many other students who need to be "made" to do their assignments. Students admit that even though they have the best of intentions to comply with course requirements such as participating in online asynchronous discussions, "life" often intrudes and their best intentions are not fulfilled. So instructors are advised to mandate a minimum level of participation through earning points toward a course grade, which serves to motivate those students with insufficient self-motivation.
- A balance needs to be reached in the amount of discussion entries submitted by the instructor. While every student posting deserves to be read, not every posting should be replied to by the instructor. On the other hand, instructors should not appear absent from the discussions by a lack of postings. The former can overpower students and decrease the amount of student to student interaction. The latter is damaging in that it may convey a sense to the students that the instructor does not place a value on the discussions. This author has read every student posting in every online course he has taught. He usually has a 10-15% reply rate to students, meaning that out of 100 student discussion postings, he replies to 10-15 of them. However, he has read every single student posting in each online course he has taught, which amounts to tens of thousands of postings over 60 courses.

The New York Institute of Technology (NYIT) has developed a ratio to be followed by its online instructors. Its faculty members must access their online courses at least three times a week. However, most average faculty members do so six times weekly. They also have to be certified to teach online, which is included in their contract. Using Blackboard, NYIT divides the number of student hits by the faculty hits. The faculty's "interaction density" must be <80 but the faculty average is under 20. The results for all faculty members are posted. NYIT arrived at this proportion based on historical data and comparing that against the complaint logs from the students whose complaints were in regards to lack of interactivity on the part of the instructors.

- On a rotating basis, students within the course can be used as discussion facilitators. Their use does not diminish the instructor's presence, per se, but enables the student facilitators to experience discussions from another perspective. Thomas (2002) proposes using students in a "starter-wrapper technique," which involves student "starters" developing the online discussion. Then another student is assigned is "wrapper," who reads all the postings in a given discussions and then writes up a summary of the dialogue. However, many students do not warm up to being discussion facilitators. They see the assignment as extra coursework, usually uncompensated for in terms of course points.
- Discussions should strive to reflect higher order thinking skills (HOTS), critical discourse, and reflective practices. One path to this goal is to be aware of the instructor's "stance." Gerber et al. (2005) found a relationship between instructor "stance" (referring to the position that the instructor assumes in a given discussion) and the student's response. Instructor stances range from a background role in which students offer input to a "more active role, challenging students to articulate and defend their positions in different contexts" (Gerber et al., 2005, p. 26). Gerber et al. found that when instructors challenged students in a supportive manner, students answered with a higher amount of reasoning and referencing.
- Questions that elicit yes-no types of responses are to be avoided. Questions and topics for discussions should be crafted so as to "provide a context for the discussion and to help students stay centered" (Black, 2005).
- Discussions need to be connected to the course, and specifically to that assignments or readings for that time period. In this manner, the discussions can serve to extend the substance of the assignments into another context and provide additional insight into the assignment or readings.
- Include a social board (sometimes referred to as a discussion café) for non-topic/course discussions. A social board allows students the freedom to submit postings that might not be related to a given discussion but that add to the feeling of community for the course. Using a social board serves to minimize those types of postings showing up in focused discussions. That way, the mainline discussions stay more focused on the given topics, rather than wander off onto side topics of the students' choosing.

The preceding citations and accompanying recommendations concerning online discussions are not meant to be an exhaustive listing. The number of "tips, tricks, and techniques" for improving online discussions extends beyond the confines of this present study. A complete listing would require a much longer article, perhaps a book. As more instructors teach online and incorporate discussions into their courses, more suggestions for improving discussions will become known. Also, as more research studies analyze various aspects of online discussions, instructors will come to realize what additional methods can be used.

Student Feedback. Apart from what online instructors themselves and researchers conclude about online discussions, students also offer their insight and advice. The following quotations represent a sampling of actual student responses to a request in an online course discussion to provide feedback about various aspects of the course, including the discussions. The discussion was part of a blended course taught by the author in summer 2005. The Blackboard course management system was used.

• "I really enjoyed the discussion board. This particular activity opened up the discussions within our class to a new level. People who hardly ever say anything became more vocal and were able to clearly express their opinions on particular topics. I would love to set-up a discussion board for my students to ask questions and respond to discussion topics. The discussion board creates a comfortable atmosphere for discussion which would allow my shy students' more freedom to comment. I am thinking about having a discussion board day once a month in my class."

- "The discussion boards allowed everyone to have a voice. Sometimes in the classroom there are some people that dominate discussions but on the computer everyone has the opportunity to really state how they were feeling."
- "The discussion board gave me insight into how my peers thought. It is an effective way for students to participate and contribute ideas and learn from each other. Discussion boards can help students improve their writing skills and teach them how share their points of view."
- "The discussion boards caused me to be more vocal because the topics were more that just one sentence questions; you had to give the subject matter a great deal of thought. The forced you to give in depth details about your thoughts, views and feelings; this caused me to think more strongly about what I was commenting about. The reason is because I knew that I would have to defend my statements to my classmates if I was not on point. I also could get a good sense of how my classmate's views were regarding the various topics."
- "The activity that I enjoyed the most was the one that I was the most reluctant to participate in the group discussion board. Overall I enjoyed the topics and having the opportunity to get up on my soapbox and tell everyone my opinion. I am not shy to begin with but there is something liberating about conversing on a message board. Nowhere else in life can you take back or reword what you've just said until it sounds exactly the way you want it to. I enjoyed getting to know the true personality of many of my classmates who never speak in class and replying to the posts of those that I agreed with as well as those that I did not."
- "The greatest challenge for me during this class was to write and express my opinion on certain issues using Blackboard. This was different for me because I am normally very quiet and reserved. However, after responding to the questions from the professor and other members in my cohort, I began to feel more comfortable with this assignment. I was able to write and express myself to others in a way that boosted my confidence in speaking to the group during our discussions in class. Hopefully, after the birth of my second child, I will return to middle school and teach my favorite subject of Social Studies. Instead of keeping a journal about certain issues that will be discussed in class, it would serve a greater purpose to use Blackboard and have students dialogue with each other to improve their writing and critical thinking skills. Also, Blackboard discussions will allow students to use computers, increase their typing skills, and participate on different topics in the classroom."
- "Contributing to the success of the course was the relevancy of the topics on the Discussion Board and the high standard of entries and insights from the participants. Overall the correlation of the course content with the effects of the particular group dynamics of the cohort made for a compelling learning experience."
- "Another part of the class that I will not forget is the discussion board. Since I am connected to the Internet often, it was not hard to find time to respond, but it was a bit embarrassing to be the first one to post every time. One week I even waited 12 hours, hoping someone else would post, but when they didn't, I just went ahead.
- "The most stimulating part of this course was the instructor's willingness to allow dialogue among class members. This dialogue, though often heated, allowed me to hear and feel the passion of others concerning issues surrounding technology (present and future) impact on society. The passion generated from this subject is a direct result of the concern of classroom teachers in regards to issues such as equity."

SUMMARY

Overall, asynchronous online discussions have much to offer the teaching/learning process, but online instructors need to know the best practices associated with using discussions in their courses. This study highlighted some of these best practices as drawn from the related research, from the author's personal experiences, and from the words of online students themselves. Only by studying and using such best practices will online discussions achieve the goals set by instructors who have to start somewhere, sometime using online discussions. By following best practices these instructors can shorten their learning curves, improving their use of online discussions in less time. While there is still much to be learned about using online discussions, it is safe to say that if instructors are going to incorporate such a teaching tool in their classes, then they should strive to do it correctly. While they accumulate their own body of knowledge as to what works best for them and their students, they would be well advised to adhere to best practices as outline in this study.

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