CREATIVE USE OF THREADED DISCUSSION AREAS
by Karen M. Peters     Used with author’s permission

So many times we hear from faculty that they started a threaded discussion area and the students never used it. With such a great classroom tool, we had to ask ourselves, "why?" Threaded discussions allow for assimilation, reflection, critical thinking… this just did not make sense. In investigating the situation, we found that students need a little more guidance when it comes to residential asynchronous tools. There need to be accountability and guidelines in order for the experience to truly be a learning experience. Granted, there are students who will learn on their own in any situation, but for the most part we need to coach or guide them with asynchronous tools.

Learner Control. In an asynchronous learning environment, the instructor provides the leadership, designs the environment and manages the process; the learner engages the environment, collaborates with other learners, resources and experts to construct knowledge.

Research on learner control purports the more the learners control the elements of instruction, the more rewarding the experience will be. That does not mean total learner control, nor does it insure that students can take control without guidance. Your task as an instructor or faculty member is to find a balance between total instructor control and total learner control. You will want to create strategies, assignments or environments in which key decisions are delegated to the learner, while designing them in such a way that your learning outcomes can be achieved. So, there is control on your part, there is direction, but both are a function of the design of the task. How you as an instructor design the task is what will gauge the success, not the technology.

The inherent design of the Web and the ability to provide flexible links to information facilitates the conceptual interconnectedness and associations that are central to knowledge. Free from pressure for immediate response, asynchronous activities such as online discussion tools provide learners with time to reflect, formulate ideas, and produce more thoughtful responses.

Why use on-line discussion tools? Most education is shaped by a MIXTURE of instrumental and transformative purposes; and different uses of technology can support different combinations of those purposes. Instrumental education is that in which the learner acquires new knowledge or skills for the purpose of being able to do something in particular. Transformative education is that in which the learner participates in a process for the purpose of changing in some important ways as an individual human being or member of a community. So by moving some of your activities on-line to discussion areas, your students are gaining valuable exposure that may help them have the job skills advantage over another student with similar grades and backgrounds in degrees, that have not been exposed to on-line threaded discussion areas. That is the instrumental part. The transformative advantage is the student experiences the on-line community of communicators and collaborators.
FIVE SPECIFIC EDUCATIONAL ADVANTAGES OF A COURSE WITH ON-LINE DISCUSSION TOOLS

>1. Discussion is enhanced.

In a learning situation the primary goal of any discussion is to promote thinking. Web-based discussion tools provide many ways to increase discussion between class members and faculty. Researchers have found that adding threaded discussion areas to a course increases student motivation and participation in class 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 (and in some cases, expert's comments).

>2. Students "Walk Around the Entire Statue."

Access to multiple perspectives is important early on in education. So many times students get caught up in just one philosophy or view of the content area. Learning occurs when new ideas are assimilated with older ideas and applied. On-line threaded discussion areas allow multiple perspectives to be posted in one place. Student's questions and answers and critically think about the possibilities beyond their initial perspective.

>3. Students are more confident.

The literature is full of examples of shy students "speaking up" in an on-line environment. It has been our experience in using on-line threaded discussion tools that not only do students who normally keep quiet, "speak up," but their answers are rich in reflection and thought. Each individual has equal opportunity to express themselves in an on-line environment. Our own analysis of assessments on threaded discussions and learning supports students feel more confident in this type of learning situation. There are no distractions like in a typical classroom. Students take more risks.

>4. Students become life long learners.

Life long learning is an important goal not only for educators, but for potential employers as well. Students need to think, reflect, and reason to be able to solve problems and make decisions. On-line threaded discussions, if designed correctly, can enhance higher order thinking while engaging students in the learning process. Forcing the students to write about what they think or what they have learned is active learning. Being exposed to multiple opinions and perspectives prepares our students to be life-long learners as they compare and contrast other perspectives with what they already know, connect them to goals and come to some conclusion about the topic.
>5. Physical Location Is Not An Issue

Although we found that students still like to meet at the trendy coffee shops to discuss course topics, when your team is inter-institutional this is not an option.

Students on geographically dispersed group projects must coordinate schedules. Sometimes this is not possible so students end up working independently and in a piece-meal approach to the project. With on-line discussion tools, this is no longer an issue. Students can communicate and update each other without the constraints of date, time, and place.

ASYNCHRONOUS LEARNING ENVIRONMENTS: KEY ISSUES

Access. Instructors need to make sure their students have hands on experience with the selected tool before assignments start, so that any potential problems can be worked out in the beginning. What we do is give the students "tasks" that are low stakes, but still count toward their grade. Students might be asked to e-mail their contact information to the professor, or participate in a threaded discussion about the instructions for the tool they will be using. This helps pinpoint any potential problems before students get into class materials.

Group Dynamics. Care needs to be taken to not have more than 7 in a group. It is important to gather as much information as possible up-front from students to make sure groups are selected wisely. Studies have shown that random assignments can lead to less cohesive groups and un-productive groups. Clear expectations and guidelines for participation need to be developed. Groups can develop these on their own or the instructor can assign them. Don't expect that students know how to work in a group. We provide on-line materials on effective team management, time management and working in virtual teams to our students. We even have a resource on working out team conflict available for students.

Course Content and Medium. Since “good teaching is good teaching regardless of the medium,” a good in class activity will be good on-line, right? It may or it may not. Instructors need to adapt teaching strategies to benefit from the extended features (or, possibilities) the technology allows. Instructors also need to look at what they may be giving up compared to what they did previously in class.

Workload. I can not stress the issue of workload enough: We have found that since on-line activities are not in class and are "anytime / anyplace," faculty tend to think the possibilities for use are endless. It is helpful to make a chart of all 13-15 weeks of the course, and to look at what is expected from students both in and out of class. Remember: this is probably NOT their only class. Simply because most students are of the video game generation does not necessarily imply that they will be naturals at on-line discussions and activities.
**Training.** Course planning schedules should also include opportunities for all TAs learn the "no-stakes" assignments ahead before they become accountable for discussion on-line.

**Evaluation.** Instructors, do you plan on using the same evaluation for on-line activities as you do in class? Why or why not? Are you keeping track of time spent? As with any new strategy you will want to evaluate your learning outcomes first, and then look at more qualitative issues like motivation for on-line activities and general student feelings. There is not a lot of research out there on asynchronous learning environments, so student comments and opinions can teach us a lot. Last, but not least, look at cost factors to students, you and the institution as a whole.

**FOSTERING GROUP PARTICIPATION**

It is difficult to make any meaningful generalizations or predictions about the role of technologies like threaded discussion areas in fostering or inhibiting group participation because the particular characteristics of the group and the objectives of the assignment determine the mode of communication. Research supports the very nature of computer conferencing (like the capacity to support interaction between and among students and instructors) promotes a collaborative approach to learning. There can be a negative effect if communication becomes unfocused and students lose their train of thought. This usually occurs at the beginning and is a result of inexperience. Most educational environments are organized to favor independent knowledge acquisition and individual performance. A major challenge is for students to learn to abandon the individualistic notions of learning traditional schools cultivate. These common reasons students for which students do not collaborate on-line reflect this individualism:

- students do not want to leave their best ideas on-line
- students feel they are "cheating" when they see other students' ideas
- students feel it is difficult to follow a discussion on-line without leadership

**Peer to Peer Learning.** Encouraging them to develop and use peer-to-peer learning, evaluation and teaming are valuable experiences to the students. In cooperative learning experiences students often benefit more from giving help than from receiving it. When students are encouraged to provide feedback to other students on course related issues, it forces them to think more thoroughly about the ideas brought up in the course.

**Physical Proximity.** Physical proximity enables fine grained postural, gestural and speech interactions and even sharing of artifacts. Meeting in person supports feelings of participation. If at all possible student teams prefer to meet in person the first few times. If meeting in person is not an option, think about other ways that students can share artifacts. Use whiteboards and synchronous meeting areas creatively.
Social Presence. Studies support higher student satisfaction and motivation when discussions have a social presence. Instructors might want to encourage students to use emoticons for "social presence.” Students did better in collaborative activities where sufficient context and some detail of the decision making process was provided. We include diagrams, worksheets, pictures, caricatures, anything we can to help support the context and discussion.

If students do not have to participate at specific times they may not participate at all. When these students finally get to the messages they are faced with an overwhelming task and get no benefit from participation. Although we say "anytime" or "anyplace," discussions are more productive when strict guidelines are set and grades are dependent on timely participation throughout the semester.

CONCRETE STEPS FOR ON-LINE DISCUSSION

Before you begin

First and foremost read the directions for whatever threaded discussion tool area you are using. As an instructor you should have a backup plan. Remember, it is the learning activity that is important, not the technology. If the technology fails, make sure you have a plan that reinforces the learning goals and outcomes of the assignments.

Plan student activities weeks before the semester starts, and as early as week one or two, have a discussion about the different format of the course. The following is an outline of different types of activities that will increasingly challenge students to utilize the conference’s potential as the semester progresses:

- introductions
- chapter summaries
- literature reviews
- quick polls of relevant "debates" in your field
- group debates
- students creating questions from the class material
- "fieldwork" assignments (e.g., case studies)
- short research projects
- proposal writing
- peer review

Strategies

1. From the beginning, don't separate what's happening in the on-line discussion from what's in the face-to-face class meetings. One idea is to base class quizzes on information posted from students. Students need to see the function of the technology used for their regular class activities or they will not take the on-line assignments seriously.

If on-line activities are considered an add-on of low priority and infrequent use, students will not master the technology, and they will not bother to explore the potential of electronic in-depth discussions when those discussions make up only 10% of their course
grade. It is important to require students to log in at least twice every week (early during the week to enter their comment to a topic, and later that week to read and respond to replies others have made to that topic). In doing so, it helps to develop incentives for students so regular and legitimate participation is achieved. The less frequently learners are expected to log on and take part in the discussions the less lively the discussions. Longer wait time between comment and reply produce an intellectual detachment leading to "mini essays" rather than productive discussion.

2. Don’t expect students to know how to collaborate. Allow for forums on group conflicts and group dynamics. Support those forums with resources on teaming. Furthermore, as the instructor, you will need to monitor the discussions. With so many alternate perspectives, students may suffer from information overload and may get confused as to what is fact and what is opinion.

3. Provide students with thorough handouts and training on the use of the software and on-line discussion, but then make them responsible for familiarizing themselves and each other with the technology. If students are to make the effort to learn the technology and be enthusiastic about its learning potential, it has to be important to the course and contribute to the student’s grade. It is crucial that students become independent of you as the technical expert for the system, otherwise they'll never learn to collaborate with their classmates. Don't make hasty allowances for students' perceived incompetence of dealing with computers. They'll learn once they find out it's important for the course and important to their future no matter what discipline. (I usually give students technology tasks at the beginning of class that are no-stakes tasks. It is at that time that students pinpoint any potential problems they might have with technology. If a student does not report their problems at that time, I do not take any excuse of incompetence later.)

4. Structure activities so that all students come on-line at the same time, not necessarily synchronously, but within the same few days. Students who come on-line later than others may be faced with an already established community and feel left out from the beginning. If you want students to work in an "unstructured" environment, stage your exercises throughout the semester to move from more structured to more unstructured. Learners should be introduced to the unstructured gradually.

5. Use metaphors to create a sense of architecture for your students to themselves in the various on-line activities you create for them. For instance, you can call a conference for socializing "The Water Hole", a conference for exchanging literature references "The Library", and conference for providing each other with technical assistance, "Techies Anonymous," etc.

6. Stress to your students the importance of a good learning environment. If they are trying to participate in on-line discussions at work, they are competing with priorities of daily tasks. A busy dorm or lab can interfere with the benefits of this type of discussion. Encourage students to find time when there is less competition with other tasks or conversations.
7. Social support activities are very important for a class. They provide the emotional glue that motivates students to learn together and to learn from each other (rather than only from the teacher). Create areas where groups of students (teams) can work on a question or problem before they post to the entire class. However, don't expect students to be able to meet in small groups outside of class time, especially with larger classes.

8. Students should be aware that each conference environment has its own standards of (verbal) behavior. A formal conference requires attention to correct language use and you will be graded accordingly, whereas in your own private groups this is not an issue.

9. Enter a controversial topic related to the class content each week and request that students discuss it electronically. Have students defend the issues posted throughout the semester. This can be done by saving or extracting overriding issues for the whole semester and assigning student teams to defend either a pro or a con position searching through a particular on-line discussion. Allow a period at the end of the class for a facilitated discussion of what has been learned and how it has been learned. As the semester progresses, make students synthesize what was posted throughout the semester.

10. Don't squeeze everything into a single discussion. This becomes rather confusing. Move discussions or create new topics as they become necessary. One suggestion is to create multiple discussions for your course. This way you can keep each one focused on one purpose (e.g., one for assisting each other with technical advice, one for sharing literature references, one for each small-group discussion, one for the weekly discussion topics, etc.). Informal discussions should be open to the whole class, whereas some formal discussions need to be reserved as group work-space.

11. Encourage students to do work for the discussion off-line. In some cases, they may need to learn how to transfer files, but in many cases, they will be able to copy and paste text from word processors directly into discussion message boxes. Make sure they know how important it is to have a backup of work.

12. If it seems appropriate, invite online content experts to the class discussion. Faculty members from the same or other departments on campus may be available for a week to respond to student questions. Authors whose books or articles are part of the course readings might be reached for electronic reactions to questions via e-mail, etc. Experts from the field are usually more than willing to serve as mentors throughout the semester or at key decision points in a case.

**Examples of Current Practice**

**Summaries.** Students read a tutorial and reacted to questions on the material with exercises operating on a two week cycle. The students worked in groups of 6, with a different point person responsible for summarizing and posting the group's answers. A main discussion area was provided for general discussion and questions between students. A virtual chat was set up for questions to the TAs once a week. Questions to the
TAs or instructor were much more productive since students worked on their own as much as they could.

**Interviews.** To support critical thinking, we created an on-line interview relevance to the course material first. These "interviewees" each had their own web page. Students read about the person and were then asked to formulate a question for this person. In addition to the interview question, the students had to submit justification for their question and how it related to the course material.

**Ask the Expert.** We adapted this area to support an "ask the expert" activity for another class. 18 industry experts from different areas of expertise in the telecommunications industry participated in a 5 week on-line case assignment. Students read each expert's page. Some expert's provided pictures and some did not. After reading about the experts, students then asked the experts questions at key decision points in the case assignment. Faculty monitored the questions to make sure that the same question was not submitted twice to each expert since they were giving their time freely. Also, if two or three questions were similar, the faculty merged the questions into one.

**Guest Facilitator.** We will be inviting a guest facilitator to lead a class discussion (via the class bulletin board) over the course of a week. The guest facilitator is well-known in the field and students were already going to be reading an article he wrote as part of their class work. Now that he's agreed to be a guest facilitator, students will have a chance to ask him questions about his article and his work, first hand. A wonderful chance to bring their studies to life. Students will actually begin reading his article early in the course and will be given a "heads up" about the discussion so that they can begin to formulate questions. Then, later in the course (about 2/3 of the way through), they'll re-read the article and then participate in the discussion. Student participation during the week will be counted toward their overall "Class Participation" grade.

**Role Playing.** In one class, students work through a case study in small teams. At one point in the case study, which has to do with computer networks in K-12 schools, each team is to analyze the information they've got and determine what additional questions they need to ask of the "school principal." They then "interview" the principal (the course instructor plays the role) via either a private bulletin board forum that has been set up for each team or through a real-time chat session (which is automatically logged by the system).

**Public Bulletin Boards.** We used bulletin boards as places where students (who were teachers/trainers themselves) were to post ideas they had for how to integrate the specific technologies they were learning about into their own classrooms. They were directed to post their own ideas and then give feedback to 2 other students on those students ideas. In giving the feedback they were directed to share with their peers ideas for how the original idea could be utilized in a different discipline or expanded on, or share their own experience implementing a similar idea in their own classroom (when possible). This activity took place multiple times throughout the course, each time focusing on a
different technology. By the end of the course, students had a rich collection of ideas to "take away," which they loved!

**Team Critiques.** Students work in small teams to critique research articles that the team selects. (The activity is repeated 3 times in the course - each team has 3 members, so they take turns selecting playing "leader"). They are given a private bulletin board forum in which to complete the assignment. When they are done (there is a list of specific information they are to submit as a team), they post their collaborative critique to a whole-class forum.

**Definitions.** Five key concepts from the weekly chapters were posted on-line. Students were encouraged to submit their definition or understanding of the concept. Students were not allowed to use a dictionary or book definition. This helped students to see different perspectives on similar concepts, and also helped them to articulate meaning and therefore enhance communication. We were then ready to discuss on-line the rest of the material.

**Formulating Questions.** Students were asked to submit a question for each chapter via e-mail. The top 5 questions were submitted to the threaded discussion area where they could be discussed. The owner of the question was the moderator and was responsible for answering all questions about his/her question to the class.

**Key Issues.** Three key issues for each section were posted on-line. Students worked in teams to formulate discussion for the issues. Each team was then to post a summary of the issue for the rest of the class to review. Any questions for the summaries were the responsibility of the team who posted that summary.

**Polling.** We used CT's polling area to start each new section. We would post the conflicting ideas that were going to be discussed to get a feel for where the class stood on these issues before we began. At the end of the section we took the poll again and compared these to the beginning poll. We learned so much from this activity and the students really enjoyed it. The polls generated much more meaningful discussion.