# FACULTY FOCUS

# Student Collaboration
# in the Online Classroom

Presented by

## ONLINE CL@SSROOM
### IDEAS FOR EFFECTIVE ONLINE INSTRUCTION

# Student Collaboration in the Online Classroom

# Table of Contents

# Student Collaboration in the Online Classroom

Using team assignments in an online course can be an excellent way to create community and improve learning. But just as in a face-to-face course, student collaboration in the online classroom requires careful course design, student preparation, and team management.

This *Online Classroom* special report is a compilation of articles that will help you
- recognize when teamwork is an appropriate strategy
- overcome student resistance to working together on group projects
- select collaboration tools
- teach students how to collaborate online
- monitor teams and help resolve conflict, and provide meaningful feedback.

We have compiled this special report to provide you with online collaboration design and facilitation ideas that work, whether you are a new or seasoned online instructor.

— Rob Kelly
Editor
*Online Classroom*

# ONLINE TEAMWORK
# Quick Reference

*Best Practices compiled from* **Online Cl@ssroom**

## What Is Teamwork?

Teamwork occurs when individual peers redefine themselves as a group. (Smith, p.26)

Collaborative learning, collective decision making, teambuilding, and group projects are all teamwork activities that involve taking responsibility for one's ideas and having sensitivity to the ideas and goals of others. (Shank, p. 12)

Teamwork mirrors the real world where sharing information and under-standing the views of others is often critical. (Shank, p. 12)

## What are the Benefits of Teamwork? (Engle, p.11)

- Learners think through topics more thoroughly
- Teamwork encourages exploration of alternative perspectives and solutions
- Teamwork stimulates critical thinking and helps learners clarify ideas through discussion and debate
- Solutions are typically better than what one learner could develop working individually — particularly if the project is complex.

## What Other Skills Does Teamwork Develop? (Engle, p.11)

- High-Level Thinking skills
- Negotiating skills
- Feedback skills
- Communication skills
- Project Management skills
- Interpersonal skills
- Intercultural skills

Kelly, Justin, Neil, and Cori have been assigned a teamwork project. Kelly tends to take charge and makes sure everything gets done according to her high standards. Justin is happy because he was on a team with Kelly previously and received a high grade without putting in much effort. Neil has been finishing his degree one course at a time because of his hectic work schedule, and Cori is new. Because of family obligations, Cori is only able to work on school projects in the evenings.

See any likely problems for this team? As you know, teamwork projects can be frustrating. The most common reasons for learner frustrations include inadequate preparation and communication, and the most common reason for faculty frustration is the need to deal with learner frustrations. (Shank, p. 9)

## How Do Instructors Successfully Incorporate Teamwork in Online Teaching and Learning?

**• Define Teamwork & Prepare Learners for Team Roles Early**

Begin by making teamwork a stated course outcome. Collaboration, participation, and communication expectations should be written into the syllabus. (Roby, 2005) Then, discuss teamwork, broadly, during the first class. Use real-life examples of the benefits of teamwork with which learners can identify as a great teamwork motivator. (Sull, p. 8)

Terry Morris, associate professor at William Rainey Harper College in Palatine, Illinois, uses her online "Working in Teams" module (*http://terrymorris.net/teamwork*) to help learners understand team roles, how to be good team members, and how to resolve conflicts. After learners have used the module, she facilitates a discussion about teamwork experiences, including what made them good or not so good and how to prevent the not-so-good ones. (Shank, p. 9)

**• Establish Criteria for Forming The Teams**

Some instructors set up teams and others allow learners to form their own teams. If learners are allowed to select their own teams, it's important to provide a way for them to learn enough about each other to make good decisions about who to work with. (Shank, p. 9)

Instructors who assign learners to teams have many options. Learners may be randomly assigned or assigned based on their interests, skill levels, partici-

**Sample Teamwork Course**
Outcome Statement
In this course you are required to collaborate on a team project:
- You will use the same team for the entire course.
- Your team will share a Discussion Forum.
- Teamwork grades consist of two elements: (Engle, p. 11)
  1. a group grade for the product itself and
  2. an individual grade based on peer reviews of your contribution to the team.
- Failure to participate in team projects is an automatic one-grade deduction for the course. (Engle, p. 11)

**Sample Team Agreement**
- Project Title & Due Date
- Project Objectives/Purpose
- Team Members & Contact Info
- Member Expertise
- How to Communicate/How Often
- Project Tasks & Deadlines
- Member Roles/Deliverables
- Conflict Management Procedure

**Sample Peer Evaluation** (Shank, p. 9)
Does this team member
- accept responsibility for tasks determined by the team?
- respect differences of opinion and backgrounds?
- provide positive feedback of team member accomplishments?
- keep in contact with team members for the purpose of maintaining team cohesion and collaboration?
- meet team deadlines?

**Working in Teams Tutorial**
(Shank, p. 9)
*http://terrymorris.net/teamwork*

pation levels, or their learning styles. (Humbert, p. 17)

Forming teams based on learning styles is a great way of giving learners the opportunity to develop projects that best fit their specific styles. For instance, an instructor could have a team of kinesthetic learners develop a Web page, a team of auditory learners develop and record a jingle, and a group of visual learners write a paper or create a flyer. (Humbert, p. 17)

Once grouping criteria have been established, create teams of three to five learners. (Roby, p. 23) Introduce the project and then, if possible, give the team a relatively easy task before they take on more complex team tasks. "Before you actually launch a project, it's important to make sure that everybody knows who's doing what," says Jan Engle, coordinator of instruction development at Governors State University. (Engle, p. 11)

**• Guide Learners Through Team Communication**
Regardless of course platform (on-campus, hybrid, or fully online) allow team members to choose whether they work face to face, by telephone, or online. (Dineen, p. 19) Online interaction options can include e-mail, threaded discussion, text-based chat, document sharing, and blogs. Instructors decide whether to limit online options depending on whether they plan to monitor team interactions and whether team communication will be private within the group or open to the rest of the class.

Once teams are formed and the learners have some understanding of what is expected, it's important that they document their understanding. To facilitate this, teams should construct their first collaborative assignment, a formal team agreement. (Shank, p. 9) "We identified the roles and responsibilities, the tasks, and how they would be shared. And we did it all through discussion threads. Being able to have that record of the process was very helpful," says Valerie Taylor, a former online learner. (Taylor, p. 29)

**• Improve Participation Through Peer Evaluation & Varied Membership**
Some learners resist teamwork because of past experiences where they ended up doing most of the work while others did nothing and everyone got the same grade. (Engle, p. 11) To prevent inequity, set up a formal mechanism so team members can provide feedback about and to each other. This allows team members time to adjust their behaviors while they can still make a positive difference. The results of these assessments can also be used to determine individual grades for team assignments. (Shank, p. 9)

Another idea is to replicate professional contexts where membership in working groups changes frequently as tasks evolve. Alternating team roles (Piezon & Ferree, p. 21) and/or team membership may reduce social loafing without reducing levels of team communication or learning outcomes. (Dineen, p. 19)

**• Seek Feedback**
In addition to a general course evaluation, ask students for feedback on teamwork projects/exercises, particularly those that are newly implemented. Use the comments received to adjust, abandon, or confirm the use of specific teamwork projects. (Roby, p. 23)

# Keeping Teamwork Alive, Motivated, and Enthused!

*By Errol Craig Sull*

Teamwork: it is a specified or non-specified section of so many online courses where students have the opportunity to "speak" with one another in an asynchronous environment. Yet online instructors often overlook its importance, and it can be the most difficult section to "maintain." To peek in and see a teamwork thread of five, six, or so students sharing ideas, growing their learning from this participation, and offering good ideas and responses—this is the stuff that online instructors dream of seeing in teamwork postings. Yet motivating students to buy into the teamwork concept—beyond getting a grade—can be a challenge. It is far easier for the online student to work by him/herself than in a teamwork environment—and to do this for an entire course, well, instructors are wont to say ... good luck!

Some basic approaches, a bit of time, and a persistent enthusiasm on the instructor's part can translate into teamwork sessions by students that are outstanding in that they result in the core outcome set for teamwork, can be fun and engaging, and make for a more enjoyable and meaningful class for both students and instructor.

To accomplish this, try the following techniques:

**Emphasize and explain teamwork—early.** Many students have never taken an online course or have not had one that used teamwork, thus many aspects of it will be foreign. It's very important that you discuss teamwork, broadly, in your first posting of the class, but also follow this with another posting that only emphasizes and explains teamwork—this one-subject posting lets students know how important it is and they will not lose it amongst other aspects of the class. Be sure to use the active voice and active, involved verbs—this "feel" only adds to the overall importance you place on teamwork and its value.

**Give an example of a good teamwork session.** Students need to know that their teamwork responses cannot be merely "I agree," "That's cool," "Nice job," and the like—yes, short responses can certainly be part of teamwork, but the ideal teamwork thread will have all team members involved, each offering substantive posts (both proactive and reactive) and about 30 percent short reactive postings. Copying and posting a previous team's thread that offers what you seek in your class will give them a nice guide—so much more effective than simply your description!

**Become an active part of teamwork.** You cannot be merely the "teacher observer," but rather you need to dive in as well: respond to some of the posts, offer suggestions, give kudos when appropriate. (Never chastise one student "in front" of the other team member; rather, do this in a private email.) By doing this, the students can see that you walk the walk, not just talk the talk—and a combination of your presence and what you offer will truly help motivate them to stay active in teamwork!

**Post a list of teamwork problems—with possible solutions.** There will be a variety of teamwork problems that pop up: team members not contributing, being too bossy, using negative language, personally attacking other team members; technical difficulties with postings, late postings, misunder-standing posting requirements or procedures; students who complain about their teamwork grade, about other team members, or your comments regarding their team postings—the list goes on. By posting a list of these, and your suggestions for each, at the beginning of the course you will cut down—tremendously—on student "teamwork emails" to you!

**Use teamwork "genius" from students to motivate the class.** Scour the team postings regularly and gather those that extend beyond that one team but can benefit the entire class—in teamwork or any other area of the course. This can result in two positive outcomes: first, students will love to have their "genius" team postings used for the entire class as great examples; second, you will be demonstrating the importance of teamwork—and both are great motivators.

**Maintain a list of teamwork "nuggets."** These will be items you harvest from teamwork throughout the course that are so good that they can be used from course to course to demonstrate great ideas that came from teamwork; to motivate students in teamwork or another portion of the course; and to offer suggestions, insights, and info for this, that, or another course portion. I have so many that they are broken into categories—including "Great Metaphors and Analogies"—and they prove very helpful as motivational or information "dust" sprinkled throughout a course.

**Be sure to offer substantive resources for teams.** Beyond your opinions and observations on postings during teamwork, be sure to post websites, anecdotal information, and the like that is specific to the teamwork thread—not only does this show you are actively interested in teamwork but that you have gone "the extra mile" with solid items that can make a team's efforts—whether it a team project or a team discussion—better.

**Answer all teamwork questions**

**within 24 hours.** In most online courses, student questions to the instructor are usually not posted in a teamwork thread—but this will not prevent students from doing so. Often, these are spur-of-the-moment, emotion-filled questions—the kind that necessitate the quickest of responses. Be on the lookout for them—and let your students know that all questions, comments, etc. posted or sent to you will receive a response within 24 hours. (Don't single out teamwork: if you do, you are inviting students to post questions to you there!)

**Use Reality-Based Education in explaining the benefits of teamwork beyond a grade.** Always look for opportunities beyond the course to show the benefit of teamwork—these can include working together, new ideas coming out of group interchanges, interacting with varied personalities, overcoming hurdles, and making team decisions. Be sure to bring real-life examples of these with which the students can identify (Reality-Based Education)—this is a great teamwork motivator, as it points out Teamwork value in everyday life.

**Stay 100 percent enthusiastic about teamwork's importance.** You never want to give the appearance you are a "rah! rah!" supporter of teamwork because it is your job or only for the first part of a course; students quickly pick up on this. Teamwork—properly executed teamwork—is a crucial component of any class, and you must remain its most ardent cheerleader not only in words bit in deeds ... from day one to day last of the class.@

# Improving Results and Reducing Frustrations from Team Activities

*By Patti Shank, PhD, CPT*

Shauna, Juan, Morris, and Kati make up team #3 in Dr. Davidson's online business ethics course. Shauna is a planner and makes detailed plans for home, work, and school so she can make sure that everything she wants to accomplish gets done according to her very high standards. Juan is thrilled to be on Shauna's team because he worked with her in a previous course and knows that Shauna's plans usually result in optimal outcomes (and high grades). Morris has been finishing his degree online because he is unable to fit classroom-based courses into his hectic travel schedule, and Kati is a new online learner. Because of her family obligations, she is only able to work on school projects in the evenings.

See any likely problems for this team from the get-go? If you have been implementing collaborative projects, you know that they can be frustrating. Collaborating at a distance adds additional potential frustrations. The most common reasons for learner frustrations include inadequate preparation and communication, and the most common reasons for faculty frustration include the need to deal with learner frustrations.

## Setting up teams

In online courses, learners often don't know much, if anything, about one another, so it's hard to form teams based on commonalities. Online instructors should consider implementing a process whereby learners are able to find commonalities or differences useful for team formation and activities. Depending on the purpose of the

collaboration, learners can share information about themselves such as course-related special interests, specific skills (when heterogeneous skills are needed), desired topic (when teams can choose a topic), collaboration style (such as well-planned and more laissez-faire), and availability (weekday/weekend, time of day, time zone).

Some instructors set up teams and others allow learners to form their own teams. If you prefer to allow learners to select their own groups, it's important to provide a way for them to learn enough about each other to make good decisions about who to work with.

## Understanding teamwork

Because so many educational activities reward individual results, lots of folks are unprepared for teamwork. Before beginning collaborative projects then, learners should ideally be prepared for team roles and responsibilities and resolving typical team problems.

Terry Morris, associate professor at William Rainey Harper College in Palatine, Illinois, uses her "Working in Teams" module (http://terrymorris. net/teamwork/) to help learners in her courses understand team roles, how to be a good team member, and how to resolve conflicts. Consider having learners use this resource (or build one of your own). After learners have used it, facilitate an online discussion about good collaborative experiences, including what made them good or not so

good and how to prevent the not-so-good ones.

## Team agreements

Once teams are formed and the students have some understanding of what is expected, it's really important that they document their understanding, so all team members are on the same page and can refer back to the agreement as needed. To facilitate this, teams should construct their first collaborative assignment, a formal team agreement.

Joanna C. Dunlap, assistant professor in the School of Education and Human Development, University of Colorado at Denver and Health Science Center, has each team answer the following questions (and I adapted her list to include a few of my own):

- Will they will have a leader, and if so, who this will be, and will this role will be rotated?
- How will work be distributed? Who will do what? Who is the designated backup?
- What work style do they agree to?
- Are there any known problems or problematic dates or times that need to be factored in?
- When and how will they "meet" and communicate with each other? How often?
- How will iteration and version control get handled?
- Who will post the team deliverables?
- How will they provide constructive feedback to each other?

- How will they handle work that is sub par, incomplete, or not done?

The instructor ideally should review team agreements and provide feedback on agreements that aren't specific enough or otherwise unlikely to work well. It's a good idea to not allow teams to proceed with other team assignments until a solid and workable team agreement that all members of the team support is in place.

## Team assessments

Well-thought-out team agreements can greatly reduce team problems, but they may not eliminate them. As a result, it's a good idea to set up a formal mechanism for team members to provide feedback to each other. In addition to providing valuable input about how each team member is meeting team commitments, if completed throughout the course, this allows all learners time to adjust their behaviors while it can still make a positive difference.

Dr. Dunlap uses teamwork assessments at various points in her online courses. The results of these assessments impact individual grades for team assignment when assessments show that a team member is not fulfilling commitments. For example, she may lower team deliverable grades for anyone who receives less than 50 percent of the allowable points from more than one team member. Here are some of the questions Dunlap uses in her team assessments.

Does this team member
- accept responsibility for tasks de-

termined by the team?
- respect differences of opinion and backgrounds?
- provide positive feedback of team member accomplishments?
- keep in contact with team members for the purpose of maintaining team cohesion and collaboration?
- meet team deadlines?

This process empowers team members to have a say in the grade distribution on team assignments. Everyone on the team receiving an identical grade despite inadequate contributions by some team members is one of the biggest complaints from learners about team assignments. The team assessment process also lets the instructor know what additional support he or she needs to provide to teams and individual team members.

## Your turn

Consider adapting the ideas in this article to your team assignments in order to have greater benefits and fewer frustrations. Also, consider working on these ideas collaboratively with other online instructors and instructional designers in your institution so that all can benefit from the collaboration.

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## The Benefits of Active Learning in a Collaborative Environment

According to Jan Engle, collaborative active learning

- develops higher-level thinking skills—students think through the topics more thoroughly,
- encourages exploration of alternative perspectives and solutions,
- stimulates critical thinking and helps students clarify ideas

through discussion and debate, and
- generates solutions that are typically better than what one student can develop working individually—particularly if the project is complex.

This type of learning also helps develop the following ancillary skills:
 a. Teamwork skills

b. Negotiating skills
c. Feedback skills
d. Communication skills
e. Project management skills
f. Interpersonal skills; skills in dealing with diversity

Students also learn strategies for learning by interacting and observing team members.

# How to Promote Collaborative Active Online Learning

Jan Engle, coordinator of instruction development at Governors State University, uses group work in her online courses with an initial emphasis on process and, as a course progresses, a growing emphasis on product.

One of the biggest problems with doing group projects online (and face-to-face) is student resistance. "One of the best ways to overcome resistance is obviously for students to have a positive experience. Unfortunately, many of them come into an online class having had a very negative experience with group work. Almost always, those negative experiences stem from problems where they've been on teams where they ended up doing most of the work and other people did nothing and everybody got the same grade," Engle says.

To prevent this inequity, Engle makes participation in group work mandatory and uses peer evaluation to encourage equal participation. Grades consist of two elements: the group grade of the product itself and a grade for participation (based on peer review).

Engle provides a rubric for peer evaluation. Failure to participate in group projects is an automatic one-course grade deduction. "I do that primarily because really bad group experiences and failure to participate in the online environment just decimate the sense of community we've worked so hard to develop up to that point," she says.

Preliminary group projects in Engle's courses tend to be relatively easy and fun, in order to emphasize group processes. "Before you actually launch a project, it's important to make sure early on that everybody knows who's doing what and that they have contin-gency plans," she says. "And if they have nonparticipating members, I give groups the ability to fire a member, so that they are not continually spending all of their energy trying to chase someone who is not going to participate anyhow."

If students in her course have not done online group work before, Engle introduces the project and then, if possible, gives the students a relatively easy team task before they take on more complex team projects. She offers suggestions on using threaded discussion and chat and asks students to address the following organizational issues:

- How are you going to divide the project so that each team member has a part?
- Who is going to be responsible for each part?
- How are you going to communicate during the project?
- How will members submit their work to the group?
- What is the deadline for the submissions of individual pieces?
- Who is going to be responsible for putting the pieces together into one paper?
- How are you going to handle final proofing?
- What will you do if somebody does not do his or her part or does not meet deadlines?
- How are you going to go about answering questions that group members might have about the project?

Engle also monitors all groups by making herself a member of every discussion group. "Early on, I'm paying attention to groups in which I'm not seeing any activity," she says. "If I'm not seeing any activity in the discussion thread, then I'll post a message to that group, saying something such as, 'It looks like you're getting off to a slow start. Are there any problems that you need help with?' It's kind of a gentle nudge so that if there really are problems, that tends to bring them forward."

Engle encourages her students to send her private emails to alert her to problems; however, she makes it a point to have the students resolve problems in the threaded discussions. "I'm not solving their problems. I'm really helping facilitate their resolution of the problem. There's a tendency as an instructor to want to solve their problems, but that just doesn't work. You just really have to get in, and I might try to encourage. I may do it through a discussion thread. I might suggest that we have a team chat where we can get in and talk about the issues and get them resolved."

## Project design

An important consideration in incorporating group work into an online course is making sure that it suits the goals of the course and that it makes "authentic use of the content that's being presented," Engle says. "If you use group work simply for the sake of incorporating group work, you're probably not going to create an engaging exercise."

One of Engle's most successful group projects was a scavenger hunt for an introduction to online learning course. Leading up to the scavenger hunt, students learned about search engines, search strategies, Boolean logic, and the relative merits of different search engines for different purposes.

"In this course, I wanted to make sure that the students had an opportunity to do virtual group work, and I also wanted them to be using this content knowledge from this unit on find-

ing information on the Internet," Engle says.

The scavenger hunt consisted of 50 esoteric trivia questions that students were not likely to know the answers to. Each group consisted of five students, so each student in each group was responsible for 10 questions. Each team captain submitted answers to the questions through WebCT's quiz tool. The grade for the project was based on the number of correct questions, and Engle gave extra credit to the group that finished first with the most correct answers and to the group that demonstrated the most effective teamwork.

Teams were required to use threaded discussion or chat, which enabled Engle to monitor group interaction and made communication within the groups less confusing than using email would have done.

In an online graduate course in online learning, Engle makes it a point to create group projects that are common to all students but are not in any one student's field of expertise. When she first tried this approach, some students felt that it was a waste of time to design solutions that were of no interest to them. "It was clear to me that they weren't understanding that, in order for everybody to design and see alternate design strategies, they had to be looking at something that is common to everybody in the group," Engle says. She explained to them, "If I were simply to say, 'Pick something from your own subject matter and do this project,' then the ability for other people to compare solutions doesn't exist."

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# Considering Collaboration

*By Patti Shank, PhD, CPT*

Close your eyes and see if you can recollect your high school algebra class. Do you remember who sat in the seat in front of you? Now, remember a college history or economics course. Where did you sit?

If your recollections are anything like mine, you were probably sitting at a desk in a classroom or lecture hall, taking notes, while the teacher lectured and scribbled words on the blackboard. Lecture-driven courses with individual assessments and deliverables such as tests and reports were the norm. Working together in groups may have been acceptable in some situations (e.g., study groups) but not in others (e.g., writing papers). All in all, collaboration didn't loom large in most teachers' instructional strategies toolboxes.

As a result of your own experiences, you may not have considered collaborative activities for the courses you teach. Even if you understand the benefits of collaborative activities, redesigning your courses to include them may seem daunting. You may also have questions about how to monitor and grade such activities. And you may have heard complaints from other instructors about the problems they have faced with collaborative activities. Easier to just stay with the same ole, same ole, right?

Because collaboration has critical benefits for learning, I'm going to explain in this and the next few articles, the rationale for using them, what new online tools may be valuable, how to design good collaborative activities, and how to avoid common problems. We'll start with the potential benefits and typical ways to employ collaborative activities.

## The benefits of collaborative activities

Research studies clearly indicate that learning benefits can accrue from collaborative learning activities. They describe ways that social interaction can positively influence learning, motivation, and problem solving, and can help learners gain needed support and overcome frustration. In online courses, especially, social interaction and collaborative activities can help learners avoid feelings of isolation and improve motivation and persistence.

Changes in the nature of the workplace have put an increased emphasis on teamwork, group cognition, and collective decision making. Much of today's work isn't predictable or routine, as it was 50 years ago. Work in this era of knowledge and information increasingly involves

- tasks done alongside other tasks and under complex conditions and distractions,
- competing demands and the need to continually prioritize and reprioritize, and
- complex decisions made with changing and sometimes contradictory information.

As a result, the development of critical-thinking skills, sharing, and collaborative decision making is increasingly called for in instructional environments. Effective collaboration, like most other skills, takes time, practice, and feedback.

Here are some assumptions about learning that explain why these benefits occur.

1. **Learning is social.** We learn in order to participate in the spheres of influence we are involved in or wish to be involved in. Joint inquiry and meaning making often leads to greater understanding for all.

2. **Learning is active.** Learning requires meaningful activity and integration of new ideas with what is already known. Collaboration can help learners better organize and integrate new information.

3. **Ideal learning activities are real or realistic.** Collaborative learning activities can be designed to mirror real or realistic activities, leading to enhanced engagement and learning. Collaboration can help learners deal with realistic levels of complexity, including differences of opinion and group decision making.

4. **Ideas of others are beneficial.** In collaborative activities, learners inevitably encounter differences. Negotiating these differences builds important capabilities such as understanding, tolerating, or resolving differences. These are crucial twenty-first century life and work skills.

At their best, collaborative activities involve taking responsibility for one's ideas and contributions and having sensitivity to the ideas and goals of others. In this way, they mirror the reality of living in a world where sharing information and understanding the views of others is often critical.

## Collaborative activities

The table on the next page lists some of the more common types of collaborative activities and describes how to implement them in online courses.

Collaborative activities can engage learners and help them learn. This is especially important in online courses because learners need to overcome the inevitable issues that arise when learners and instructors are separated by time and space.

It takes preparation and practice to design and implement good collaborative activities, and learners need preparation and practice to get the most from them. Hopefully the examples in the table have provided you with a few ideas for collaborative activities in your courses. Another way to find good ideas is from colleagues who have successfully implemented collaborative activities.

Collaborative activities can model what it means to learn from and with others, being sensitive to how others view the world, and taking responsibility for more than your own outcomes.

## References

Anderson, T. (2002, October 3). *Getting the mix right again: An updated and theoretical rationale for interaction.* Message posted to ITFORUM mailing list, archived at *http://it.coe.uga.edu/itforum/ paper63/paper63.htm.*

Brown, J. S., and Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher,* 18(1), 32-42.

Moore, M. G. (1993). Three types of interaction. In K. Harry, M. John, and D. Keegan (Eds.), *Distance education: New perspectives* (pp. 12-24). London: Routledge.

O'Reilly, M., and Newton, D. (2002). Interaction online: Above and beyond requirements of assessment. *Australian Journal of Educational Technology,* 18(1), 57-70.

Palloff, R. N., and Pratt, K. (2004). *Collaborating online: Learning together in community.* San Francisco, CA: Jossey-Bass.

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## Collaborative Active Learning Advice

Jan Engle offers the following advice for online instructors looking to incorporate collaborative active learning in their courses:

- Start with simple collaborative projects until you get a feel for how to structure and facilitate collaborative exercises.
- Avoid introducing group projects too early in the course, unless they are VERY basic.
- Provide specific, clear instructions.
- Provide tips for success (both for virtual communication process and for group work). Don't assume that students know how to do group projects.
- Do not abandon students during this time … you still need to be available to guide and encourage groups.
- Allow plenty of time.
- If you are going to do a very sophisticated group project in the class, try to introduce a simple exercise earlier in the course to allow groups to develop a group process that will support the more complex project that comes later.

| Activity | Description | Online Course Example |
|---|---|---|
| Case analysis | A detailed story of a real or realistic situation is introduced, along with a problem that learners can analyze and resolve. | Small groups of learners collaboratively analyze an injury case and identify measures that may be undertaken to prevent or reduce the damages from this type of injury. |
| Collaborative writing | Small groups of learners create a written deliverable. | The learners in the case analysis group write a joint position paper on the most promising measures for preventing and reducing damages from this type of injury. |
| Peer help | Learners post questions and call on the diversity of people resources to get help. The questions also provide the instructor with opportunities to assess problems and progress. | The course help discussion forum in the object-oriented programming course allows learners to post questions and get help from other learners and the instructor. As a result, questions are often answered quickly and creatively. |
| Knowledge base | Learners maintain a knowledge base to help them deal with typical problems encountered in the course content. | The intro-to-statistics course uses Web forms and a database to maintain a list of common issues and problems, and solutions for each of them. |
| Resource database | Learners find, share, tag, and maintain a list of favorite resources. | An online database has been created by the lead instructor for learners enrolled in the Web development certificate course. Learners in the program use, maintain, and add to it as part of their course activities. |
| Peer editing | Learners exchange draft versions of course deliverables (papers, Web sites, spreadsheets, etc.) and get feedback from each other in order to improve them. | Learners in a public health course write a paper on whether public health workers should advocate for the prevention of accidents (such as mandating motorcycle helmets). They share their papers with two other learners who provide feedback on the quality of their argument and writing. |
| Online discussions | Asynchronous dialogue is used for sharing and negotiating understanding. | A business law course includes two online discussion topics in the asynchronous course discussion forums each week. One discussion is initiated by the instructor. Another is initiated by one of the small groups that are formed at the beginning of the course. |

# 7 Ways to Improve Student Satisfaction in Online Courses

Preparing students for the online learning experience and managing expectations are critical to student satisfaction, says Marie Gould, assistant professor and program manager of Business Administration, and Denise Padavano, associate professor and program manager, Information Technology, both of Peirce College.

Students at Peirce College (whether they are face-to-face or online students) are required to take a one-credit online course that gives an overview of how the college works and helps develop students' time management and study skills. The course uses eCollege, the same course management system used for online, hybrid, Web-supported courses at the college.

By the time students enroll in their regular courses (which are accelerated seven-week courses), they have a working knowledge of eCollege and a good idea of what to expect. But managing expectations needs to go beyond using the technology.

The following are suggestions by Gould and Padavano for improving student satisfaction:

- **Post the course syllabus on the Web.** Part of managing expectations is letting students know up front how the course is organized.
- **Administer a learning-styles inventory.** For each of her courses, Gould uses a learning-styles inventory as an icebreaker activity, and because group work is a required component of her courses, she has students share their results of the inventory. "When the students see the strengths and weaknesses of each person, they tend to delegate roles and responsibilities based on the strengths of each of their learning styles," Gould says.
- **Explain the importance of group work.** Because some students may object to working in groups, students need to see how they will benefit from group work. "We have to try to get students to focus on why we want them to work in teams. We're not just putting them into teams because we want to make them suffer. [Teamwork] is a critical skill that students need to learn so they are functional when they get out and work. We need to help them get over that fear and manage expectations," Padavano says.
- **Use team contracts.** Major obstacles to group work are finding the time for students to work together and defining each group member's roles and responsibilities. Gould has each group develop a team contract that outlines how and when the group will work together. Interaction options include email, threaded discussion, text-based chat, document sharing, and audio bridging.
- **Use a variety of assessments.** Points should be spread evenly across different assessments because some students might not perform well on tests while others might not write very well.
- **Be flexible.** "I might have guidelines and even assignments prepared, but depending on the makeup of the class and students' learning styles and personalities, I might have to adjust some things," Padavano says. "If you find that the class is quiet, you can become more active. If you find that the students are very active, you can step back. You can facilitate based on the way that the students are participating in the course."
- **Provide frequent interaction.** Instructors need to be responsive to students' needs—Padavano recommends a 24-hour response time to students' questions—but interaction is not solely the responsibility of the instructor. Students also need to interact with each other and with the content. "Students need to touch the content every day. They want to know how they're doing, and they want to know quickly. They want to know the faculty member is there and that he or she cares about the students."

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# Open-Source Blog Platform Provides Much-Needed Communication Flexibility

When Margaret Anderson, a psychology professor at the State University of New York at Cortland, began teaching online 12 years ago, she used an open-source communication tool to facilitate online discussions. She later moved to WebCT when the college decided to stop supporting the open-source product for security reasons. But WebCT did not provide her with the flexibility she needed, so she found a new open-source communication tool—LiveJournal.

LiveJournal is a blogging tool that has helped Anderson to work around several shortcomings of WebCT. WebCT's discussion feature works well for discussions among those enrolled in a course, but Anderson wanted to open certain discussions to former students, interns' site supervisors, and colleagues in similar departments at other institutions (including several overseas).

Anderson chose LiveJournal because it is free, easy to use, and allows users to change security settings to enable variable access. She takes full advantage of the ability to change security settings to provide different access—individual, instructor, class group, entire class, select individuals outside the class, and even the entire online community—to suit specific communication needs.

At the beginning of her courses, the class as a whole has access to LiveJournal to build a sense of community and discuss issues that are pertinent to all the students. Each of these discussions lasts for two weeks. Anderson posts a question in the first week, and students respond directly to the question. In the second week, students continue the discussion. (The discussion can extend beyond two weeks, but it is not required.)

For discussions that are relevant beyond the students in a particular course, Anderson may invite colleagues and students from similar courses at other institutions to participate. For example, a discussion on how states are implementing laws related to No Child Left Behind might benefit from the perspectives of education students in different states or even the perspectives of a broader group. (Anderson reserves interaction with the general public for the end of the term.)

Anderson has students use LiveJournal for group work as well. In these instances, she can easily set up groups by changing the security settings to restrict access to certain students.

She also conducts one-on-one communication with her students by creating groups consisting of herself and each individual student. She uses this mainly for student journal entries based on each class session. In the past, she would ask students to submit their journals every two weeks for her to review. The problem with that method was that often students would write several journal entries just before they were due rather than writing them after each class session. With LiveJournal, however, each entry is date stamped.

For interns, Anderson is able to do "virtual observations," in which she can have students post artifacts of their work, such as audio or video files. Anderson also opens these intern blogs to the student's site supervisor, which provides more insight into the student's experiences.

The archives of these blogs provide students with a record of their learning, which they can use to create electronic portfolios, Anderson says. "I have students who have worked with me for three semesters, and they'll look back at their first year's journal and say, 'Wow! I didn't remember that.' In that sense I do like it because it provides opportunities for reflection."

Use of these blogs also benefits students after the class has ended, by providing them with experience using a tool that they might be able to adapt to the courses they teach in the future. "Most of my students are currently teachers, and they hear a lot about the use of technology but don't necessarily see it in action. So for a lot of them this is modeling a tool that they can use in their own classes. One of the reasons I prefer this to something like WebCT or any of the proprietary course management systems is that if a high school or middle school teacher uses this system in my class, students can replicate it on their own because it's free," Anderson says.

When considering a tool such as LiveJournal or other blogging platforms, Anderson recommends that you carefully consider the needs of the course. "Pedagogy needs to drive the technology use. I love to look at new toys and new things out there, but I want to know what the needs of my course are, and what is the best technology to meet those needs?"

Before using a blogging platform, consider who will have access to each blog before the course begins, to avoid having to change security settings, which can be cumbersome. It also helps to adopt standard user name conventions to make it easier to grant access to specific forums. For example, for students enrolled in her Psychology 501 course, Anderson has students log in as 501lastname to enable her to easily sort users.

One of the disadvantages of using open-source tools is that you may not have on-campus technical support for them. However, in the case of LiveJournal, there are "excellent" user groups and FAQs to help with technical issues that arise, Anderson says.

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# Building Community in Online Classes through Group Work

*By Roxann Humbert, EdD*

Students' sense of isolation is often cited as one of the reasons for low retention rates in online classes. One way to combat this is to build group work into your online class. In doing so, you will most likely also improve retention and increase student learning. When built properly, group projects will also require students to use higher-level critical-thinking and problem-solving skills.

## Creating the groups

Deciding on how to group the students can be very important to the groups' success. Students may be randomly assigned to groups or assigned based upon their interests, their skill levels, their learning style, or their participation levels.

There are several methods for randomly creating groups. Many course management software packages include an option for randomly assigning students to groups. Another way to divide students is to have the instructor manually assign students to groups based on the course list. So the first student alphabetically would be assigned to group one, the second person alphabetically would be assigned to group two, etc.

Assigning students to groups based on a common interest is a great way to have students tackle controversial issues. To group students with common interests the instructor could provide a list of topics and have the students sign up electronically or through email for the topic they wish to discuss. To encourage critical thinking, the instructor could assign students to take the opposite position on the topic.

Giving students a technology skills assessment and grouping them by similar skills for group work is a great way to lessen the intimidation many students feel when their skill level isn't as high as that of their classmates. On the other hand, if the group were to develop some sort of technology-rich product as part of the group work, e.g., a Web page or brochure, grouping students with a range of technical abilities would make for a more successful group project. Students could assign each other tasks, and the students with the better technical skills could be responsible for developing the final product.

Grouping students by learning style is a great way of giving students the opportunity to develop projects that best fit specific styles. For instance, in a nutrition class the instructor could have a group of kinesthetic learners develop a Web page on one of the vitamins, have a group of auditory students develop and record a jingle about one of the vitamins, and have a third group of visual learners write a paper or create a flyer for one of the vitamins.

In addition to these methods of creating groups, instructors can use data provided by their learning management system (LMS) to group students. Most LMS packages track student participation. Assigning students who participate early and often to the same section can circumvent the problem of random groupings that result in one or two group members doing all the work.

## Developing group projects

The following are three group projects used in an educational technology class to encourage community building.

**Group Project 1: Online Discussion**

As a future teacher it is important that you become familiar with key issues affecting technology in public schools. Using the discussion guidelines, tips, and rubric, accomplish the following:

1. Locate the topic that has been assigned to you.
    a. Do schools need more computers or more teachers? John, Maria
    b. Is technology further widening the gap between rich and poor? William, Julie
    c. Is technology further widening the gap between males and females? Jessica, Scott
    d. Should technology resources be focused on basic skills or higher-level thinking? Shannon, Pat
2. Decide if you agree or disagree with the statement.
3. Locate two Web sources that support your position.
4. Write a brief essay (approximately 200 to 400 words) expressing your point of view.
5. Identify, by quote, the point or points from the Web resources that support your position and elaborate on your point of view.
6. Go to the discussion board and select the **Assignment 2: Discussion Questions** topic.
7. Please put your name, the letter of your topic, and a brief description in the subject line of your message, e.g., Julie's Topic B: Rich or Poor.
8. List the hyperlinks for the two websites you found.
9. Write out the topic question before you write your answer in your posting. This will help us focus on the content and keep things in order. (This is due by April 21.)
10. Reply to at least three other stu-

dents' postings, one for your assigned topic and one for each of two other topics. For instance, John will respond to Maria's posting and to one person in topic c and one in topic d. Review the responses of your fellow classmates. Ask questions to clarify any of the information that you don't understand. Post your comments, questions, and reactions as appropriate. You are not expected to comment on everyone's postings—only those that interest you (but a minimum of three). **(This is due by April 24.)**

## Group Project 2: Group Justification

For this assignment you will become the expert on a computer input or output device, develop criteria for selecting a computer input or output device, and write a justification to your school board for purchasing this device. Use the device assigned to you:

- Scanner—Richard
- Graphics Tablet—Joyce
- Digital Camera—Victoria

**Part 1:** Locate two Internet sources of reviews for your device.

**Part 2:** Develop at least a 12-item rating instrument to evaluate your device.

**Part 3:** Use your instrument to evaluate two brands/models of your device. Record your results in an Excel spreadsheet.

**Part 4:** Write a two-paragraph justification to your school board for purchasing the device. Post your spreadsheet and justification to the Input/Output Device forum.

**Part 5:** Select the justification for the classmate listed below you and decide whether or not you would allow them to purchase the device and why. Post your response as a reply to their original posting in the Input/Output Device forum.

## Group Project 3: Paired Groups

For this assignment I have divided the class into pairs.

**Group 1:** Richard, Jessica
**Group 2:** Michelle, Victoria

You will be working as a group to develop a checklist to conduct a technology inventory for a public school. Your instrument should contain the following parts:

- Part 1: Identification information, e.g., date of assessment, school name, etc.
- Part 2: Computer hardware information, i.e., number and types of computers found in the school.
- Part 3: Local Area Networks (LANs) installed in school, i.e., type and location of networks.
- Part 4: Network elements currently used, e.g., wireless, Ethernet, etc.
- Part 5: School- and countywide servers, e.g., file servers, Web servers, mail servers, etc.
- Part 6: Operating systems, e.g., MacOS, MS-DOS, Windows, etc.
- Part 7: Connectivity technologies and sources, e.g., modems, T1 lines, ATMs, cable, etc.

1. You are welcome to contact each other using whatever means you feel most comfortable with, but doing the project fully online will be more meaningful and fun for you. I have set up a private discussion topic—one for each pair. You are welcome to use these discussion areas to communicate and collaborate on your projects. Your group also has a chat area.
2. I have access to your private group discussions so I can monitor your collaborative group efforts. I will not participate in your groups' discussions unless you specifically ask for my help. If you choose to communicate via regular email, please CC me on your messages. The reason for this is that unless you include me in your loop, I will have no way to assess your group's collaboration.

3. As a group, decide on the technology you will use to develop your checklist, e.g., Microsoft Word, HTML, etc.
4. Post your group's collective assignment to the technology inventory discussion board on or before the date scheduled on the course calendar for review by other class members. I will give feedback to your team on your project shortly thereafter.
5. You will use your group's private discussion forum to communicate with each other.
6. The collaborative group project rubric will be used to evaluate the first 80 points of this assignment.
7. Evaluate the effectiveness of your group. There is a maximum of 20 points for this part of the assignment, and each member of your group will receive a possible 15 out of the assigned points for submitting the group project critique. The remaining five points evaluate your individual contributions to the group project. The last question in the review asks you to highlight your contributions to the group project. Tell me how many of the five points you feel you earned.

These are just a few examples of what instructors can do to build a sense of community in online courses. Providing exercises and activities that encourage group work and participation help to maintain that sense of community.

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# Study: Changing Virtual Team Membership Improves Participation

Are you having trouble getting virtual team members to contribute equally to team projects? If so, perhaps you should try varying the membership of these teams because, according to a study by Brian Dineen (see reference below), doing so can reduce the issue of social loafing, where team members rely on other group members to do the work for them.

Dineen formed groups in a large, upper-division organizational behavior class and gave members the option of working face to face, by telephone, or online. He opted for this model because he felt it closely replicated conditions now common in professional contexts. Employees work with others in a virtual environment, and frequently, as tasks evolve, membership in working groups changes.

Dineen provides complete logistical details for the assignment, including the following important elements that were used: groups were made up of three to five members; for each of eight weeks they analyzed short cases relevant to course material and answered two questions related to the case; and group work, which counted for one-fourth of their grade, included a peer evaluation component. Even though students had the option of meeting face-to-face or by phone, 70 percent reported that they completed the entire exercise without ever meeting face-to-face. Instead, they used private bulletin boards that the instructor set up for them within WebCT.

For comparative purposes, Dineen kept membership in half of the 26 groups stable. Those students worked together from start to finish on the project. In the other groups, Dineen changed group membership weekly; in the second week, groups gained and lost one member, and in the third and fourth weeks they gained and lost two members. Students did not know how long they would be in the group. They simply received an email announcing that they had been reassigned to another group. They could no longer access their previous group's bulletin board and were given access to a new one.

Dineen looked at the impact of this group work design across a number of different variables. He collected data from students before the experience, on weekly surveys and on the anonymous end-of-course evaluation. From the data gathered, Dineen discovered that most of those who responded to the surveys did not have previous group experience in a virtual environment. The inexperienced group reported significantly higher degrees of learning outcomes and confidence than those who had worked in virtual groups before.

Dineen explains the reduction of social loafing by citing other research documenting that when groups contain strangers, team members tend to be on their best behavior because they are somewhat inhibited by people they don't know. Quantitative data indicated that social loafing was isolated to less than 5 percent of possible cases. However, levels of cohesion reported by group members were higher in those groups with stable membership. Interestingly, students in groups with fluid membership did not report lower levels of internal communication or decreases in their perceived abilities to influence group decision making.

Also of note were some findings related to extraverted and introverted team members. Results "show that introverts actually felt *more* influence than extraverts during this exercise and perceived a greater cohesiveness and better internal communication." This finding held true regardless of whether group membership was stable or fluid. (p. 613) Dineen suspects that the virtual environment somehow "levels the playing field," making it easier for introverts to contribute during group interactions. "This is important because it suggests that conducting online team exercises might bring more equivalent contributions from all team members." (p. 613)

This article is exemplary not only for the creative design of the group work, but also for the comprehensive way in which the impact of the approach was analyzed and assessed. This is an impressive piece of practitioner pedagogical scholarship.

**Reference:** Dineen, B. R. (2005). TeamXchange: A team project experience involving virtual teams and fluid team membership. *Journal of Management Education*, 29(4), 593–616. @

# Facilitating Student Interaction with Online Discussion Groups

*By Eric K. Cooper, PhD*

Many instructors use group work in their courses. I especially like to use group work for adults as it helps to draw upon their varied experiences. Unfortunately, adding group work to accelerated adult programs creates additional challenges. Less face-to-face contact, a characteristic of many accelerated courses, can lead to added pressure to cover course content. Adding outside group-related assignments could be perceived as undermining the adult-friendly nature of accelerated programs and lead to student resistance, especially for those students with full-time careers, families, and long commutes to and from class. A possible alternative to face-to-face group work is the use of online discussion groups.

I taught an accelerated, eight-week, once-a-week child development course to non-traditionally aged students. In an effort to increase group work and offer experiential learning without requiring more face-to-face time, I added an online component to enhance the child observation requirement of the course.

Discussion groups and learning communities have been suggested as necessary for effective learning and student satisfaction in online courses (Rossman 1999). An online format, especially one of an asynchronous nature, eliminates the need for adult students to return to campus or become confined to others' work or home schedules. According to Presby (2002), online discussion groups, especially used in combination with face-to-face interaction, have many positive outcomes. However, online discussion groups are not without criticism, including lack of interpersonal communication and miscommunication

(Jonassen, Davidson, Collins, Campbell, and Haag 1995), lack of focus and planning (Presby 2002), and apprehension of and opposition to technology (Cooper 2000; Presby 2002). Careful planning and continued evaluation can effectively address these issues.

## Method

After reviewing the literature on how to foster interaction among students outside of the classroom, I added an online discussion component to the course. Objectives of this course require students to complete child observations. Online group work seemed a beneficial means for enhancing the observation requirement.

Each student observed two children at different stages of development. I divided the class into eight, three-member groups in which students discussed the similarities and differences of their children, relating information obtained from the textbook and the classroom to the observations. These discussions took place online between face-to-face class meetings using a course management system. Because some researchers suggest face-to-face orientations to online assignments (Cooper 2000; Presby 2002), I demonstrated the use of the course management system during the first class meeting, suggesting how students would effectively use it to post assignments and interact and attempting to suspend any student opposition and apprehension regarding technology.

During the online assignment, group members commented on each member's observations, helping to determine if each child was following typical development patterns, com-

menting on each child's uniqueness, and relating course and text information the observer may have missed. Each group discussed the observations with the goal of group support to make connections between the observations, text, and class discussions. The groups then completed short class presentations every two weeks to update the entire class on their progress.

The online assignment was graded on thoroughness of individual member observations, substance of the comments from each member, and timeliness of completion. Students were then given an anonymous survey to evaluate the online assignment. The survey consisted of 21 questions, rated on a scale of one to five (strongly disagree to strongly agree). Students were allowed to offer additional comments on the survey.

## Results and discussion

Students viewed the child observation experience as a positive learning experience, which supports our department's philosophy of experiential learning. Additionally, most students believed group work contributed to the experience. Of the eight groups, I feel six performed well with group members being supportive, offering advice, making connections to the course content, and taking the assignment seriously. One group had a more difficult time with the assignment and another group, as a whole, did poorly. These two groups did poorly on this assignment due to a lack of member participation and extreme lateness of responses, which was specific to the assignment as these instances did not necessarily mirror overall course involvement.

Overall, both the students and I viewed the online discussion groups positively. As expected, based on the literature and initial comments in the classroom, many students were initially apprehensive about the assignment, but a face-to-face orientation to

the online system was beneficial in alleviating student concerns about technology and online discussions. Additionally, continued chances for questions and answers helped alleviate student concerns. Students indicated the small groups were appropriate, and I found the small groups easy to monitor. However, some students commented that groups with only three members may have been too small.

Based on the results, students appreciated the convenience of the online format without extra face-to-face meetings. Presby (2002) suggested shyer students would reflect on and participate more in the online discussions. Although shyness was not addressed in the survey, students tended to agree they could reflect more on the assignment. Overall, students believed the addition of the online assignment was appropriate for an accelerated course and suggested using the assignment in the future.

The online discussion groups were designed to allow students to control and dictate the direction of the discussions. Jonassen, Davidson, Collins, Campbell, and Haag (1995) suggest the instructor should remain absent or act only as facilitator because instructor involvement may impede student collaboration. Less instructor direction moves student interaction to a much deeper level with better understanding and interaction (Caverly and MacDonald 2002). However, many of the students wanted more instructor involvement in the online discussions. More instructor involvement is supported by much of the literature (e.g., Swan 2002) and should be used, especially in courses with higher levels of apprehension surrounding online assignments. For most of the students in the class, this was their first foray into online work. The discussions should become more student-directed as students progress in a course, but an eight-week course did not allow sufficient time for transition.

The online discussion groups enhanced the child observation experience in the accelerated psychology course based on student perception. However, based on my experience during this assignment, it is important to plan the assignments carefully, anticipate student questions, and post clear expectations regarding online participation and grading criteria. Also, it is important to offer prompt feedback as students will expect immediate responses online. Additionally, some apprehension surrounding the use of technology and the online environment, especially from adult students, should be expected. It also may be necessary for the instructor to interact more in the assignment discussions than originally intended. These results may have been different with traditionally aged students.

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## References

Caverly, D. C., and L. MacDonald. 2002. Techtalk: Online learning communities. *Journal of Developmental Education*, 25: 36-37.

Cooper, L. 2000. Anatomy of an online course. In J. J. Hirschbuhl, and D. Bishop, eds., *Computers in education* (9th ed., 204-208). Guilford, CT: Dushkin/McGraw-Hill.

Jonassen, D., M. Davidson, M. Collins, J. Campbell, and B. B. Haag. 1995. Constructivism and computer-mediated communication in distance education. *American Journal of Distance Education*, 9: 7-26.

Presby, L. 2002. Seven tips for highly effective online courses. In J. J. Hirschbuhl, and D. Bishop, eds., *Computers in education* (10th ed., 217-218). Guilford, CT: McGraw-Hill/Dushkin.

Rossman, M. H. 1999. Successful online teaching using an asynchronous learner discussion form. *Journal of Asynchronous Learning Networks*, 3: 91-97. Swan, K. 2002. Building learning communities in online courses: The importance of interaction. Education, Communication, and Information, 2:23-49. @

## How to Reduce Social Loafing

In any group there is always the potential for real or perceived inequity in the amount of work done by individuals. This phenomenon is known as social loafing. Unlike lurking, which some would argue is a valid learning style, social loafing can have major negative consequences for the learning team, such as reduced motivation.

At this year's Conference on Distance Teaching & Learning, Sherry Piezon, a doctoral student at Florida State University, and William Ferree, manager of Web-enables programs at the Naval War College, offered the following recommendations for reducing this problem:

- Require high levels of accountability
- Alternate group roles
- Balance group member skills and knowledge
- Encourage discussions
- Give meaningful feedback to the group and individuals
- Provide rewards for group performance
- Provide all groups with for performance data from other groups for comparison
- Use a grading system that gives a group grade and an individual grade—the latter based on individual contribution to the final project and participation in group meetings
- Assign readings on group work processes
- Provide opportunities to increase collaboration and publicize results.

# Active Online Learning Prepares Students for the Workplace, Reflects Changing Learning Style Preferences

Changing workplace demands and student learning style preferences require that instructors rethink their courses. No longer can students passively absorb knowledge. They must become active learners — interacting with peers and designing and implementing the learning, says Jane Legacy, MBA/MBE chair at Southern New Hampshire University's School of Business.

Legacy uses active learning techniques such as group inquiry, online field trips, asynchronous debate, and Web quests in her online courses—in organizational leadership and human relations, research and technology, and online learning—to prepare students for the types of learning situations they will encounter on the job and to reflect the changes in the ways students prefer to learn. "If we want our students to be successful in the workplace, we've got to model what we want them to be like," Legacy says. "If the ultimate goal for us is to prepare people to learn, unlearn, and relearn the rest of their lives, they have to start having fun, and we need to make them accountable. And the only way we're going to give them that opportunity is to not be so rigid with our instructions."

In addition, Legacy says, today's students are less interested in lectures and prefer more variety in the instructional methods used in a course. "They love to be active participants in the learning process, and the research says also that students learn better from other students than they do from teachers," Legacy says.

Because of the changes in students' preferred styles of learning, Legacy recommends that instructors change instructional strategies every 15 to 18 minutes, whether the course is on campus or online.

Legacy's courses are set up as modules on a Wednesday to Wednesday schedule rather than Sunday to Sunday to give students more time on the weekends to complete their work. Each module consists of 15-minute increments. For example, students may read for 15 minutes, then spend 15 minutes in a group activity, followed by 15 minutes in the discussion forum. (A three-credit course typically requires students to put in approximately nine hours a week.)

The first step in creating an active learning environment online is to get students to relate what is going on in the course to their lives, which helps them problem solve and think critically, two skills that are essential in the workplace.

This concept is played out in a variety of ways in Legacy's courses. She begins each course with a pre-assessment of students' skills and abilities by taking all the course's learning outcomes and having each student rate himself or herself on those outcomes. Legacy also does a personality assessment, and based on those two assessments, she puts students in groups so that each group has a cross section of skill levels and personality traits.

From the beginning of each course, each student's work is visible online to others in the course through an e-portfolio. Students also critique each others' work using a set of rubrics. This helps students be more creative in their work, and it also gives them ideas for how to approach their own projects. "It's all about students designing, implementing, and evaluating their own work using other people's work as resources," Legacy says.

Legacy also has a discussion board in Blackboard in which students each week are asked to reflect on their "deliverable" for that week. "I change the word 'assignment' to 'deliverable' because the word 'deliverable' puts the responsibility on the students," Legacy says.

Discussing the deliverables "teaches them that there is always a reflection in work." It gives students a chance to analyze what worked and what didn't.

The goal of Legacy's courses is to relate the material to real-world situations, which motivates students to learn by emphasizing the things they will need to know when they are in a particular career. It also gets students to relate the material to their own lives and to seek other people's perspectives.

For example, Legacy might include an "expert witness" in a course, someone who works in a field that is relevant to the course. If it's a law class, the expert witness might be an attorney. Legacy will have the students read a relevant chapter and follow up by asking the expert witness how the material relates to the real world or how his or her experiences compare to what the students read in the textbook.

One of the keys to getting students to take an active role in their own learning and their peers is a set of clear rubrics. For group projects, the rubrics list all the things students need to accomplish, and for each group project students assess each others' participation.

The rubrics remove the subjectivity of the grading process and give students the responsibility of selecting the grade they want. For example, in threaded discussions, students know that in order to get a C, they must re-

spond with information that comes from the textbook. To get a B, they must use information from the textbook and another resource. To get an A, they must respond with information from the textbook and two other resources.

Like all learning situations, the success of active learning techniques depends largely on the dedication and skills of the individuals in the course. Legacy teaches at the undergraduate and graduate levels. Legacy's graduate students, who are generally in the business world and understand the value of active learning because it closely re-

sembles how they conduct themselves at work, are more inclined than her undergraduates to "dive into" active learning. However, the undergraduates generally have less fear of the technology.

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# 17 Tips for Successfully Including Peer Collaboration in an Online Course

*By Teshia Young Roby, PhD*

Building relationships and communities through peer collaboration in online courses is a concern for many instructors, and finding a starting point might be a challenge. Fortunately, there are instructors who have undergone the processes.

Instructors within the University System of Georgia participated in a study that explored examples of peer collaboration exercises within their online university courses. The instructors represented five universities and nine academic disciplines. Their educational and professional backgrounds varied greatly. For most of the instructors, the online courses in which they included peer collaboration were their first experiences teaching online, and most did not receive formal training to do so, nor did they have access to teaching assistants during the various phases of the course. The instructors employed a variety of communication mechanisms and technology tools within the courses involved in the study and the examples of peer collaboration exercises offered by the instructors ranged from the simple to the complex.

The data provided by the instructors

revealed several instances of common practices and lessons learned, and a set of heuristics for successfully including peer collaboration in an online course emerged.

1. **Get rid of preconceptions**—Prior to beginning the design of the online collaboration activities, abandon any preconceptions regarding which types of exercises cannot occur online.
2. **Adapt and adopt existing collaborative exercises**—Rather than creating new and original online peer collaboration exercises from the beginning, exercises can be developed initially by referencing previous classroom collaborative activities that proved successful and adapting those exercises for use online.
3. **Begin with a manageable amount of collaboration**—To provide optimal learning experiences for the students, incorporate a few well-planned exercises when first including such activities.
4. **Consider a course orientation**—Though including a face-to-face

orientation for an online course is not an option in some cases, an initial session to introduce the course can be beneficial to the online student. If a face-to-face course orientation is not an option, an initial course content module can be designed to present that information.

5. **Make the collaboration a stated course outcome**—Encourage student efficacy with peer collaboration by first making collaboration a stated outcome of the course. Collaboration, participation, and communication expectations must be written into the syllabus.
6. **Teach students how to collaborate**—Provide students with information and tips on how to interact with classmates, problem solve, constructively criticize, divide and assume responsibilities, organize their work, manage their time, and provide an end product that is seamlessly representative of the collaborative efforts of the group.
7. **Provide structure for and require deliverables from the students**—Help students manage time and meet course milestones by requiring deliverables and informing them of expected benchmark competencies.
8. **Organize the student groups early and stabilize the groups throughout the course**—Early group formation allows the students to become familiar with their groupmates and conse-

quently promotes ease of communication within the groups. If possible, groups should remain intact for the duration of the course to promote team cohesion.

9. **Create groups of three to five students**—When groups contain more than five students, they become unmanageable. In large groups, "lurkers" are able to not participate, "slackers" are able to unduly benefit, and "controllers" are able to dominate the discourse. Groups of two may not fully allow the students learn the skills of group consensus gathering and problem solving.

10. **Instruct groups to report large problems**—During the peer collaboration exercises, students should be allowed—and expected—to solve internal problems. However, students should be informed that irreconcilable problems should be reported to allow an intervention to occur that would enable project work to progress.

11. **Provide feedback often**—Prior to tests and finals, students should receive feedback on how well they understand the course information.

12. **Carefully choose discussion topics**—When preparing discussion topics for the groups, choose interesting and controversial topics to elicit discourse.

13. **Prepare in advance for chat room discussions**—First, be organized for chat room discussions. Make the chat room topic and any associated questions available to the students at least three days prior to the exercise. Instruct the students to prepare questions and comments regarding the topic to help facilitate the flow of conversation during the exercise. Next, to promote student involvement and activity, give grades for sustentative participation in the chat discussion and inform the students of the grading structure prior to the chats.

14. **Organize the discussion board for productive discourse**—Because of the volume of traffic that the discussion board can generate, it is important to provide a great deal of structure in this area. First, create an exhaustive list of topics that might be discussed during the course and create headings for each of those topics in the discussion area. Instruct the students to post messages under the appropriate topic heading on the discussion board and make the students aware of the rules and etiquette for posting a message to the discussion area. Next, instruct the students to place questions for general consumption on the discussion board and encourage other students to respond to the message if they have an answer.

15. **Constantly facilitate and monitor online collaboration**—At no time during the course can the students be on autopilot. Since physical and verbal cues cannot be obtained from the students, facilitation and monitoring of the course are the only ways to know that they understand the concepts that are being provided. During the peer collaboration exercise, visit the discussion areas to make certain that the students remain on track with the concepts and on task with the assignment.

16. **Promote peer collaborations through grading**—When conducting group exercises that require the use of the discussion board, remind the students that posted discussions are designed to replace the classroom discussions and that only substantive contributions will be graded. In addition to the overall group grade for an exercise, be certain to require the students to individually submit their work to ensure that everyone will have something to contribute once the groups meet. Conclude the exercise by having the students complete a group evaluation.

17. **Receive student feedback on collaboration exercises**—In addition to a general course evaluation, ask students for feedback on each peer collaboration exercise, particularly those that are newly implemented. Use the comments received from the students to adjust, abandon, or confirm the use of the exercises.

An Excerpt from:
Roby, T. Y. (2002). An exploration of perceived successful and unsuccessful peer collaboration exercises within online university courses. *Department of Middle and Secondary Instruction and Instructional Technology.* Unpublished doctoral dissertation, Georgia State University, Atlanta.

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# Comparing Online Peer Interaction Methods

Face-to-face instructors are increasingly turning to online communication tools to provide students the opportunities to discuss course content with peers. There are several communication modes that support this type of interaction, and in a recent study, Bill Warrick, education instructor at George Mason University, and his colleague Stacy Connors surveyed a cohort of graduate students in an instructional technology master's program on the quality of the learning experience, peer interactions, and ease of use of email, bulletin board, and synchronous chat for collaborative group work.

## The study

In fall 2003, 49 students enrolled in two courses—Teaching With Technology and Education and the Culture of Schools—engaged in online discussions about seven books related to the culture of schools and technology tools. During the first five weeks, they used email as their discussion tool, followed by Blackboard's bulletin board feature in the second five-week period, and finally DigiChat software for synchronous communication in the final five-week period.

For each five-week discussion, the students were randomly divided into groups of four or five and were asked to discuss the readings.

In the first five-week period, each student was asked to create a chain email message about what they thought was the main idea of the reading. Each message was to be sent to the group one at a time in a specific order. As each student received peers' messages he or she would comment

and forward the original message and all additional comments to the next person in the group. When the chain message made its way back to the original sender, he or she would read all the comments and forward it to the instructor.

For the Blackboard assignment, students were asked to post and reply to other group members' comments about the main ideas of the book.

In the synchronous part of the course, the instructor created private chat rooms for each group to discuss the books. One student served as moderator and summarized the chat for the instructor.

After each five-week period, Warrick surveyed the students to determine how they rated

- their learning experiences using each of the three communication modes
- their interactions with peers using each of the three communication modes
- the ease of use of each of the three communication modes.

And at the end of the course, Warrick asked students to rank each communication mode in terms of overall quality.

## Results

Based on anonymous survey responses, the quality of the learning experiences, interactions with peers, and ease of use were consistently high across the three communication modes. In terms of quality of interactions with peers, synchronous chat rated slightly lower than the other two

modes.

On a scale of 1 to 5 where 1 is the best, the mean scores for each category were all 1's and 2's in terms of quality of learning and peer interaction. "That kind of surprised and pleased us. It said that all three were viable means of interaction," Warrick says.

As for ranking the different communication modes, there was no clear preferred mode: 31 percent ranked email as their preferred mode; 35 percent chose bulletin board; 33 percent chose synchronous chat.

Students were less divided on which communication mode they least preferred: 29 percent rated email lowest; 29 percent rated bulletin board lowest; 41 percent ranked synchronous chat the lowest.

"We just attributed that to the fact that one of the problems was that they were doing this on a weekly basis, and it is difficult to arrange time for people to meet online, particularly when they are just being introduced to the tool," Warrick says.

Warrick and Connors also analyzed the discussions that occurred in each mode. "Blackboard and chat allowed for a little more freedom of interaction. The email was a little too structured, and I wish we hadn't had it as structured as we had where they were only able to react once to someone's comments. There was not a lot of opportunity for back and forth discussion, so we didn't see the depth of interaction simply because of the way we had it structured. In Blackboard and in the synchronous chats, they were a lot more free to react and have what we term a 'general discussion' with a lot more give and take," Warrick says.

## Implications

"Inasmuch as we found that each of the three was rated highly in terms of their quality of learning and interaction, we learned that it is appropriate to use any of these three tools depending on the subject matter, time frame,

and students' learning styles," Warrick says.

In addition to the findings, informal discussions with students pointed out areas of frustration such as difficulty in organizing synchronous chats and the lack of back-and-forth interaction using email.

Students reactions to these communication tools were partly based on their previous experience with them, Warrick says. "Email was much more familiar to them. It facilitated their discussion, and it made it easier for them to share their thoughts. By the same token, one of the problems we found in talking with students after the course had ended was that they were simply reacting to what someone wrote to them. If we had a more iterative process where they could email back and forth among each of the five members a number of times, the quality of the discussion, I think, would approach what we saw in Blackboard," Warrick says.

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# Developing Community Online

*By Patricia A. Smith, EdD*

Collaborative learning is a process that advances student learning in the classroom. Collaboration occurs when individual peers redefine themselves as a group.

Groups enhance student learning. Through this learning process, students also rediscover their own individual ideas as they develop higher-level reasoning skills and strategies.

Applying collaborative learning techniques in the online classroom promotes active student involvement in the learning process. Collaboration also capitalizes on the work of the peer group to improve understanding of subject matter and development of writing in the field of study.

## Why collaborative groups?

I include group activity as a means to move students to a higher level of thinking and responding to ideas in my *Educational Philosophy and Teaching Practice* online class. Through a measure that I validated and modified called "The Educational Philosophy Test" (Jersin, 1972), online students determine their personal educational philosophies. Students are grouped in one of two categories—traditionalist or modernist—and then two subcategories are developed under each of these headings, resulting in four small philosophy groups.

These small philosophy groups promote intellectual interaction among their members, as students work to better understand difficult concepts. Because they are grouped by their personal educational philosophies, peers have similar stances on the role of education. They support one another by sending drafts of papers for input be-

fore their final essays are due. They connect online through virtual classrooms or discussion threads to discuss aspects of course material that provoke thought and require in-depth review. Through use of small groups of like thinkers, the online participants establish a bond, as group peers grapple with readings that provoke thought, such as those of Plato Aristotle, Kant, and Dewey, among others.

## Tips for developing small groups

The following are a few for incorporating small groups into any online class:

- Establish a system of grouping that is most favorable to your subject area.
- Define what you mean as *support*. Develop clear guidelines in which group members support one another.
- Provide assignments that encourage active group involvement.
- Open discussion threads in which small groups can participate.
- Establish due dates that students must meet so that they are prepared for group discussion.
- Provide writing assignments that require peer response and that further the thinking process of each student.

## Reference:
Jersin, P. (1972). What is your education EP? *The Clearing House* 46, (5), 274-278.

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# Let Students Choose How to Collaborate

Group work can be a hassle for students, particularly in the online classroom, but the learning opportunities it provides makes it a popular technique among instructors. To understand how adult learners work in groups in online courses and to develop ways to make group work more enjoyable and productive, Kathleen Ingram, assistant professor in the University of South Alabama's instructional design and development program, surveyed and interviewed students in her online graduate-level needs assessment course. She found that the groups took very different approaches based on their schedules and preferences.

## Group selection

In the first week of the course, Ingram conducted an introductory threaded discussion to help build a learning community and to give students information about each other when it came time to selecting a project and group.

Ingram posted project descriptions in the second week and gave students a chance to choose which project interested them the most and who they would like to work with. However, students did not have final say. Ingram also considered each student's amount of time in the program, instructional design experience, cultural background, technological experience with online classes, and distance from campus when she divided her 10 students into three groups.

"With the asynchronous nature of the group work, it becomes very difficulty to make decisions. You have to be comfortable with each other, and you have to have some strengths in [each group]. So I tried to make the groups even—to have some leadership and background in instructional design in each," Ingram says.

## Different approaches

One of the first group activities was to establish a charter, similar to what a group in business and industry would do. Each group created a document that described how they were going to work together and how they were going to resolve problems.

As in most online courses, the students could use email, threaded discussions, chat, and/or face-to-face meetings to work together (depending on where they were located).

The three groups took quite different approaches. One group chose to use chat and developed a set of protocols to avoid some of the problems that can come up. For example, group members agreed to use an ellipsis to indicate "I haven't finished my thought, but I want you to read this while I type the rest." And a period indicated that a person was done with a particular thought. Group members took turns as moderator and timekeeper. "They turned out to be my best group, but also had the most problems. One member was not on board, but the protocols allowed them to progress," Ingram says.

The chat protocols could have been in the charter, but because the group was working in this environment for the first time, they didn't know exactly how they would use the tools and what issues might arise.

Another group was not completely at a distance, although they had more outside commitments than the other groups and chose to do everything by email. "I would say they got along better than the other groups. They would come to consensus and then go forward with a plan, and if one of them was having a bad week, the others picked up the slack with no questions asked," Ingram says.

The third group felt it was important to meet face to face to establish rapport. Since group members were local, they had the opportunity to meet several times. This group functioned the least well because there was a person new to the program and another who was not doing his share of the work. "Because most of the communication was asynchronous, it was hard to hold that person accountable," Ingram says.

Although all of the groups were familiar with threaded discussion (Ingram used it throughout the course), none of them chose it for their group communication. Ingram speculates that the two groups chose email because they were more familiar with it and because its' more of a "push" than "pull" technology—"you don't have to go into the course. It comes to you," Ingram says.

The group that used chat, chose it because they didn't want the communication to drag out over the week, Ingram speculates.

"[The choice of communication tools] depends on the content and what the learners are trying to accomplish. Since they were trying to come to consensus and move this project along, that's why they chose chat and email. They are much more dynamic than threaded discussion. Threaded discussions are rather static and can really take longer because students are not as accountable. They can come in at the last minute, but if they're not there at the chat at the scheduled time, they've missed it," Ingram says.

## Lessons learned

This was the first time Ingram used charters to establish group practices,

and she found they didn't make much difference. [Students] actually made their decisions as problems came up and the projects evolved," Ingram says. "I would definitely use a charter and have them try to decide ahead of time how they were going to work but make it more of a living document. Rather than writing it for me, I would have them write it for themselves, and after the first couple of weeks come in and change it the way they need to."

Ingram wanted to give her students the chance to decide for themselves how they would work. While she still believes that is an important aspect of adult learning, she would create some checkpoints along the way so she can observe their communication to make sure things are going well and perhaps ask questions or offer guidance.

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# Online Process-Oriented Group Projects

Many students fear group work, and the prospect of working with classmates at a distance adds more uncertainty and apprehension. Nevertheless, group work in the online classroom can encourage active participation and teach the same group processes that many will encounter in the workplace. The following is how one online instructor uses group work in her courses.

Cynthia Calongne, computer science professor at Colorado Technical University, uses activity-based instruction in her courses whether they are on campus, hybrid, or fully online. She does this to keep the courses consistent so that students can take them in any medium and get the same instruction and because computer science lends itself well this approach. "I'm a big believer in groups because it models the way we do work in the software industry. Very few individuals write an entire product by themselves," Calongne says.

In each group project in Calongne's online courses, whether it's developing requirements specs or designing software or user interfaces, students have to elicit and define project requirements as a group. And in her graduate courses students have to form groups and develop and complete their projects in just five-and-a-half weeks.

## Group selection and formation

She begins the group process by creating a forum in which students introduce themselves, post and discuss topic ideas, and select teams.

Calongne lets students select their own teams of three to five. She tried assigning students to teams once, but that didn't work very well. "Everyone in the class I had had at least once in the campus classroom so I had an understanding of their preferences, goals, and why they had taken the class. I formed teams based on my knowledge of their backgrounds. It was disastrous. It took more work on my part to keep them motivated and going in the right direction," she says.

Along the same lines, Calongne allows groups to develop their own ways of working together. "I have seen some try to get together for face-to-face meetings because they feel disconnected. I've seen others mobilize quickly and divide the project into sections. Some are highly motivated and can work independently and gather online every few days. And some spend their initial time in threaded discussions and won't produce tangible results immediately.

"I allow them two weeks to explore and then ask them to show me some of their sections so I can give feedback. I think that's critical regardless of which method they use. I'll confirm what they're doing so they're comfortable because when there's a lot of uncertainty, the team has a hard time making confident progress. They'll spend more time worrying than actually getting the work done," Calongne says.

## The group struggle

Although Calongne provides some structure—she gives the groups a template that has all the possible sections that could be included in the project, and each group decides which sections to include—she deliberately allows for ambiguity, creating an environment where conflict is inevitable.

While online instructors in general should provide feedback within 24

hours for most classroom activities, Calongne makes an exception for team projects to allow students to learn from their mistakes. She monitors group progress throughout her courses, but provides feedback only when students ask for it or if she sees that they are getting off course.

"Each group needs to struggle," Calongne says. "It's difficult to know how long they should be allowed to struggle, but you let them struggle for a while, and then you give them three or four recommendations so they can make a choice as to how to proceed. That's important, otherwise students won't have a good team experience; they won't see the benefits of [team work]; and they won't be successful in the course."

## Informal communication

Throughout the group projects, Calongne encourages her students to take risks and to not concentrate on polishing their communication within the group. "So often there's a community of people who are uncomfortable committing their thoughts to words and having them in print. They think everything has to be precise like an exam response or research. I try not to be very formal with them so they don't spend so much time on reflection so that their answer no longer sounds like theirs."

In addition, Calongne does not have the groups submit incremental deliverables on the projects "because that just creates busy work. Why polish something that's wrong? Instead, I tell them that I'm reading all their stuff and that their classmates are reading all their stuff, which improves quality."

Calongne holds optional weekly chat sessions. Each session lasts one hour and is loosely structured. It's an opportunity for the students to review for exams and to ask questions about the group projects. Although the main goal of the group projects is to learn the process of working with others, Calongne notes that in these sessions students are often more focused on the product than the process, asking for clarifications of grading rubrics.

In cases where groups lose members (whether by dropping the course or switching to another group) students are often concerned with how it will affect the quality of the project. It isn't until the end of the course when students take time to reflect on the group projects that their learning about the process becomes apparent.

## Evaluation

Calongne uses several assessment tools. She has students evaluate each other by asking whether each team member performed. If all the team members agree that one member did not perform, that student does not receive credit for the project.

She also has objective measurements, including the number of times each student entered the course site, the quality of the posts, and the interaction within teams.

To assess other elements of the course that are not addressed by these measures, Calongne gives students bonus points for a three- to five-page email telling her what they learned and why it was significant. In this email students often indicate what they learned about the team experience, and she uses this information to refine her courses.

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# How a Former Student/Current Instructor Facilitates Online Student Collaboration

As a former online learner, Valerie Taylor, an online instructor at De Anza Community College in California, understands the needs and frustrations of her online students and the importance of interaction and collaboration to motivate and improve learning outcomes.

Even though she was enrolled in a program in online teaching and learning at California State University-Hayward, Taylor herself was hesitant to take an online course. "At the outset of the program, a couple of people I knew had enjoyed an online course they had taken. I thought, 'I'm not sure. I'm a people person, and I'm not sure I want to do this sitting at home by myself,'" Taylor says.

Within a few days, she was convinced of the effectiveness of the online format. "What was interesting to me was the sense of community that was actively promoted. I felt I knew more of my classmates better because of the introductions and discussions than I would have sitting in a classroom that I would have had to drive an hour to and an hour from after a long day of work," Taylor says.

For Taylor, the essence of the program (which used eCollege for her first two quarters and switched to Blackboard) was the threaded discussions—in both contributing to the discussion and being able to read what other people wrote. "It's imperative to be able to collect threads you previously read and be able to string them together easily. I don't know how one would have done it if the discussion tool was

any less capable in that department," Taylor says.

While she missed some of the personal contact with her classmates, being able to peruse the threaded discussions at her leisure meant that she wouldn't miss a thing, "which is huge, especially when you have a class of 30 or 40 other teaching professionals who have lots of things to say," Taylor says.

In addition to the threaded discussions, collaborating on group projects enabled her and her fellow learners to share their areas of expertise with each other. For example, Taylor worked with three other students on a project to develop a WebQuest on insects for a K-12 teacher in the group. A kindergarten teacher provided the subject-matter expertise. Taylor had more of a Web background than the others. And two other group members helped with rollovers, animation, links, and insect pictures.

"We did this iteratively, each of us contributing our piece, which worked really well. We identified the roles and responsibilities, the tasks, and how they would be shared. And we did it all through discussion threads. Being able to have that record of the process was very helpful," Taylor says.

The value of her collaborative experiences convinced Taylor to include similar elements in the course she teaches (in the CSU-Hayward program and through De Anza Community College). "Students say they hate group projects. They don't want anything to do with them. All of the students in the CSU-Hayward program said the same. But we make them do them, and they all love it. They do really well," Taylor says.

In a recent JavaScript course, some of Taylor's local students got together physically to work on group projects. Some talked on the phone, and some used email. She found that the groups that collaborated online struggled more in the beginning, "but, I think, in the end, they had a better understanding of what they were doing, and everybody participated more equitably."
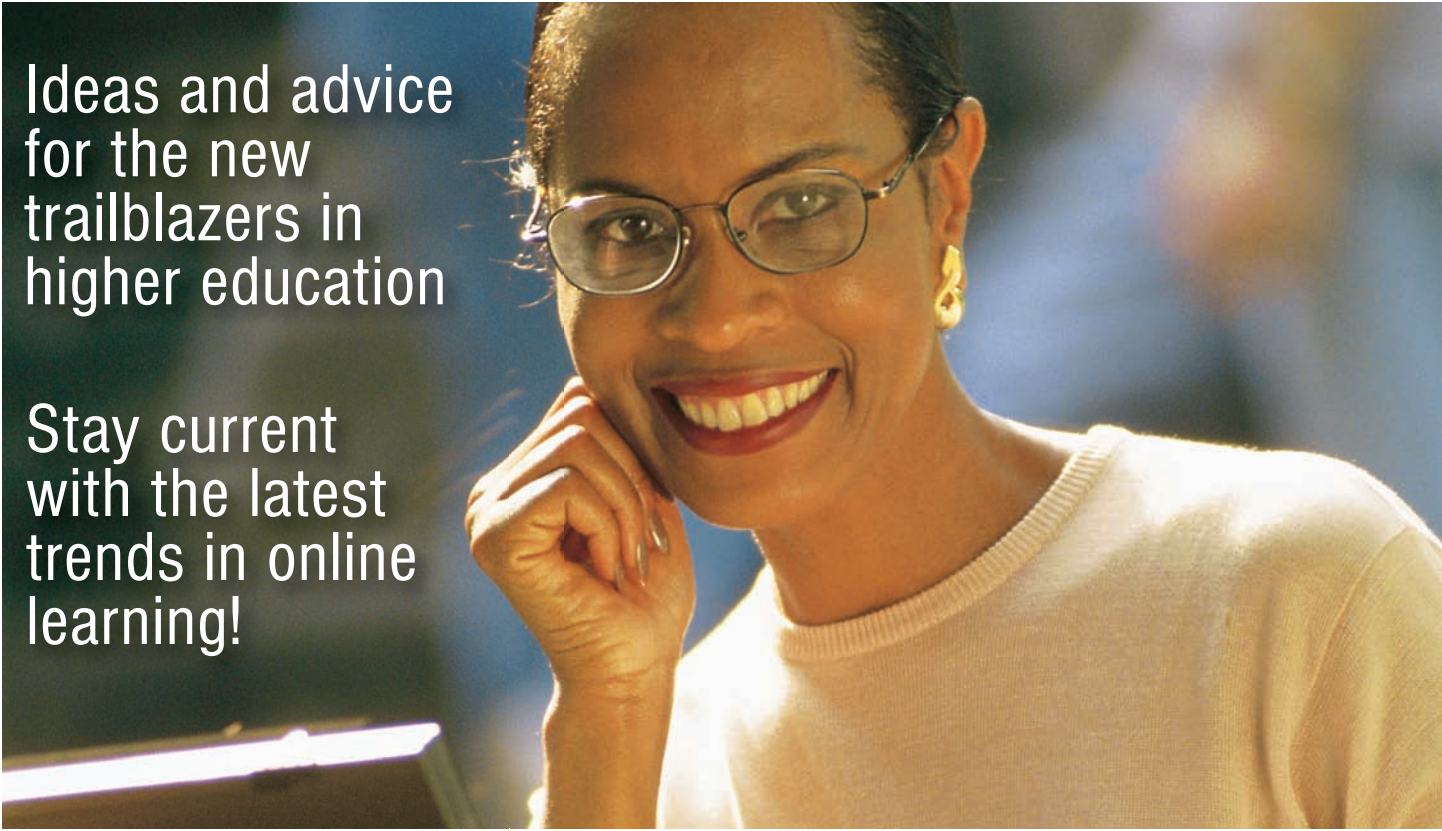
When she first started teaching online, she created private discussion areas for each group (and gave herself access so she could monitor the interaction). She has since made all the groups open to the entire class in case her students are curious about what the other groups are working on and how they are working together and in case a student would like to change groups.

Taylor monitors the groups and occasionally sends emails to group members when a member is excluded or does not participate as much as the others. Taylor looks for potential problems but does not respond unless her input is needed. Because most of her students are non-traditional, they often bring project-management skills to the group that help resolve group issues, and the students will often resolve problems on their own. "I'm astonished how self-correcting groups can be," she says.

Including group work in an online course is also a good way of tailoring the course to each student's interests. For example, in the courses Taylor took at CSU-Hayward, there were corporate trainers, K-12 teachers, and higher education instructors — all of whom had different things they wanted to get out of the program. Because the courses were online, it was easier for the instructors to offer students more choices about how they learned, and the students could take a more active role in directing their learning, which increases their engagement in the course.

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