WPI Academic Technology Center

Teaching with Technology Collaboratory

Incorporating Interaction Into Your Distance Learning Course

Introduction to Interaction in Distance Learning

Teaching online in a distance learning program requires instructors to completely rethink how they deliver their courses. Interaction is one of the most difficult aspects of education to build into an online class, but it is also one of the most important. The level of interactivity from student-to-student and from student-to-instructor has a major impact on the quality of online distance learning programs (Muirhead, 2001). Research studies on interactivity show that students have a real need to make connections with other students and with their instructors.

Benefits of Incorporating Interaction into Your Distance Learning Course Interaction does not just occur in online courses, it has to be intentionally built into the instructional plan for the course. Incorporating interaction into your course has the following benefits:

- Interaction builds a sense of community among the students, which leads to student satisfaction, retention, and increased learning (Brown, 2001).
- Interaction provides students with the feedback they need to determine if they are mastering the content in your course.
- Interaction exposes students to a variety of learning resources, including content materials and experiences and knowledge shared by other students.
- Interaction makes students become more actively engaged in the learning process, leading to higher levels of learning.

Type of Interaction

There are three main types of interaction in an online distance learning course.

- 1. <u>Learner-to-Content Interaction (#contentint)</u> this type of interaction results from students examining the course content and participating in class activities.
- 2. <u>Learner-to-Learner Interaction (#learner)</u> this type of interaction can take place between two students or between several students.
- 3. <u>Learner-to-Instructor Interaction (#instructor)</u> this type of interaction is intended to reinforce student understanding of course materials and provide the student with feedback.

Strategies for Incorporating Interaction

Not all of the strategies listed below will be appropriate for every course. Try implementing a couple of the strategies suggested in each interaction category in your online distance learning course.

Learner-to-Content Interaction

Strategy

Details

Present content in more than one format.

• Content that is presented primarily in one format, such as video, audio, or text, tends to require many students to learn in a format that does not meet their learning style.

- Provide a mixture of delivery formats to meet multiple learning styles, such as combining text lectures with video clips.
- A survey of distance learning students in April 2007 indicated that they
 prefer text-based content with video and/or audio clips mixed in, followed
 by PowerPoint and Camtasia video files that combine graphics, text, and
 voice narration. Each of these formats addresses more than one learning
 style.
- Delivering content in multiple formats provides variety and eliminates monotony.

Have students participate in online simulations.

- Simulations allow students to actively engage with the content.
- Locate existing simulations online or obtain them from publishers. A good online resource is <u>MERLOT</u> (http://www.merlot.org).
- Create your own simulations. Contact the ATC to discuss options for creating simulations.

Provide links to online resources which allow students to explore the topic in more depth.

• Links to web-based materials allow students to browse and delve into content that interests them the most. They may use your links to branch off to other information sources.

Use audio and video clips for access to guest lecturers and field experts.

• Use these clips to provide an expert perspective on the topic, other than your own.

Use live, synchronous web conferencing (Interwise) for class events, such as guest speakers and student presentations.

- Web conferencing gives students live, real-time access to the instructor, guests, or student presenters, allowing them to get immediate clarification on concepts.
- Make the sessions optional since not all students can adjust their schedules to attend a live session. Record the sessions so that students who cannot attend can view them later.
- Use these sessions to supplement your required content so students can learn more about a topic if it interests them.

Minimize the amount of instructorgenerated content and guide students into generating their own content.

- Adult students in the distance learning programs have a wealth of knowledge and experience to bring to the class. Use their knowledge and experience to drive the content through the discussion forums, other communication tools you may use, and assignments they share with the class.
- Limit the content you provide to an overview of the topic which introduces the topic and puts it into context. Supplement it with Internet resources, simulations, and activities that engage the students.
- Ask students to use the wiki tool in myWPI to create content pages on a particular topic. This allows them to learn a topic in depth and share it with the other students.

Require participation in discussion forums that require students to reflect and build on the content.	 Students become actively engaged in the content through discussions about the materials you have provided. Write questions that require students to share their own perspectives and experiences in order to expand on the content you have provided.
Assign activities that require students to interact with the content and explore the topic in greater detail.	• Simulations, web searches, wiki assignments, research reviews, case studies, etc. all require students to interact with the content and learn more about the topic on their own.
Use self-tests to allow students to check their understanding of content.	 Create self-tests in myWPI for students to test their knowledge of key content concepts. Students will then know what they still need to master and they can go back and review as necessary.
	• Provide students with a list of questions they should be thinking about after they review the content. Encourage them to try answering the questions on their own.
Keep the format of your lessons consistent.	• Organize your content in a similar fashion for each lesson and use similar content formats for each lesson. As the course proceeds, this makes it easier for students to organize the content for themselves and it eliminates the need for them to adjust to a new delivery format for each lesson.
	Learner-to-Learner Interaction
Strategy	Details
Encourage socializing in the discussion forums.	• Encourage students to introduce themselves during the first week of the class. Ask them to provide information on their educational and work experiences, as well as some personal information. These introductions will help students find others with similar backgrounds and interests and leads to the building of a sense of community in the course.
	• Provide a student-only forum in the discussion forums where students can discuss anything that interests them, even if it is unrelated to the course.
Encourage content- based discussion in the discussion forums.	• Write discussion questions that are open-ended and invite students to relate their prior knowledge and work experience to the content. Students bring a lot of good information to your course and through well-designed discussions, students may learn more from each other than they do from the instructor.
Assign students to take turns moderating the discussion forums.	• Assign student to moderate for a week, or ask them to sign up to moderate the discussion for a topic that is of interest to them.
	• Double up moderators if you have a large class.
	• Ask moderators to summarize the discussion at the end of the week.
Require students to post select assignments (i.e. short papers,	• When the assignment is likely to produce a variety of responses from students, having students post their work introduces students to new perspectives and can generate lively discussion.

journals, websites, etc.) so they are available to the entire class and invite students to comment on each other's work.

• Set the expectation that all public comments on student work will be respectful. Without this assurance, some students may not feel comfortable sharing their work with the entire class.

Make the synchronous chat in myWPI available.

- Students can meet on a scheduled or ad hoc basis to discuss the content, assignments, etc.
- Students working in groups can use the chat to coordinate their projects.
- Consider scheduling chat sessions that you attend to discuss class topics.
 Post a topic or agenda before the session to help students determine whether or not they want to attend.

Encourage students to use Interwise for group meetings.

- Students can meet on a scheduled or ad hoc basis to discuss group projects, content, assignments, etc..
- Consider scheduling Interwise sessions that you attend to discuss class topics. Post a topic or agenda before the session to help students determine whether or not they want to attend.
- Contact your ATC coordinator for help with setting up Interwise.

Assign group work.

- Assign group work when an objective of your class can best be achieved by students working in groups. For example, if students would likely be working on a particular issue in the workplace as a member of a group, assign a group project to simulate the workplace experience.
- Case studies that may require discussion and different perspectives lend themselves well to group work.
- Provide discussion forums for each group.

Learner-to-Instructor Interaction

Strategy

Present a welcoming, friendly atmosphere.

Details

- Introduce yourself at the beginning of the course by posting information about yourself. In addition to your academic background, post some personal items to give the students a sense that you are approachable. Post a picture of yourself to give them a face to identify with.
- Don't be afraid to let your personality show when you are responding in the discussion forums or to e-mails.
- Use students' names when you respond to their e-mails and discussion forum postings.
- Write in the first person, using "I" when you respond.
- Be careful using humor, as it is not always easy to convey humor online.

Provide more than one way for students to contact you.

• Provide more than one way for students to contact you, so they can use the option that is most comfortable to them. For example, provide your e-mail address and your office phone number with office hours.

• Respond to students as soon as possible, ideally within 24 hours.

Provide clear and thorough information to students.

- Make sure your syllabus thoroughly describes how the course works and your expectations for students.
- Provide an FAQ (frequently asked questions) list of questions you anticipate students having about the course.
- Thoroughly describe each assignment and the grading criteria.

Maintain a presence in the discussion forums.

- Post to the discussion forums occasionally to let students know you are reading their contributions.
- Make your postings complimentary and constructive. Recognize good ideas from students and build upon student postings to steer the discussion in a new direction.
- Be careful not to post too much, as frequent instructor postings tend to limit student contributions to the discussion.

Use synchronous technologies for question and answer sessions and ad hoc discussions.

- Synchronous chat (in myWPI) or web conferencing (Interwise) allows students to ask questions and get immediate responses. Treat sessions as you would "office hours."
- Consider having one synchronous session each week or every other week.
- Keep synchronous sessions optional, as students are located in multiple time zones and may not always be able to adjust their schedules so they can attend.
- Record or log the session and make it available to students who could not attend.

Provide thorough feedback.

- Provide public feedback by complimenting students on quality contributions to the discussion.
- Provide private feedback on assignments via written comments on the assignment or via e-mail. Make sure comments are constructive and indicate to the students what they did correct and what they did wrong. It is best to always provide written comments in addition to any grade that may be given for an assignment.

Related Resources

- Improving use of discussion boards (../Idea/boards.html)
- Group Work in Online Courses (groupwork.html)
- Tips for Teaching Adult Students in Online Courses (tips.html)
- Writing a Syllabus for a Distance Learning Class (syllabus.html)

References

Berger Ehrlich, D. (2002). <u>Establishing connections: Interactivity factors for a distance education course (http://ifets.ieee.org/periodical/vol_1_2002/ehrlich.html)</u>. Educational Technology & Society, 5(1). Retrived June 20, 2005.

- Boaz, M. (1999). Effective methods of communication and student collaboration. In League for Innovation in the Community College. Teaching at a Distance: A Handbook for Instructors (pp. 41-47). Archipelago Productions.
- Brown, R. E. (2001, September). <u>The process of community-building in distance learning courses</u>
 (http://www.aln.org/publications/jaln/v5n2/v5n2 brown.asp). Journal of Asynchronous Learning Networks, 5 (2). Retrieved June 2, 2005.
- Muirhead, B. (2001). <u>Interactivity research studies (http://ifets.ieee.org/periodical/vol 3 2001/muirhead.html)</u>. Educational Technology & Society, 4(3). Retrieved June 20, 2005.
- Roblyer, M. D. & Ekhaml, L. (2000). <u>How interactive are your distance courses? A rubric for assessing interaction in distance education (http://www.westga.edu/%7Edistance/roblyer32.html)</u>. Online Journal of Distance Learning Administration, 3(2). Retrieved June 15, 2005.
- Thurmond, V. & K. Wambach. (2004). <u>Towards an understanding of interactions in distance education</u> (http://www.eaa-knowledge.com/ojni/ni/8 <u>2/interactions.htm</u>). Online Journal of Nursing Informatics, 8(2). Retrieved June 20, 2005.

Maintained by itweb@wpi.edu Last modified: Aug 13, 2007, 09:40 EDT

Academic Technology Center - Worcester Polytechnic Institute 100 Institute Road, Worcester, MA 01609-2280 Phone: +1-508-831-5220 - Fax: +1-508-831-5881 - atc-ttc@wpi.edu (mailto:atc-ttc@wpi.edu)