

ONLINE LEARNING TOOLS: ASYNCHRONOUS COMMUNICATION TOOLS

A full range of tools are available to the online instructor to promote interactions between the student and instructor, the student and course content, and the student and peers. Online instructors should be familiar with a wide range of online tools and strategically match the appropriate tool with the objective, goal, assignment, or task. Such a strategy increases the opportunity for student interaction, enhancing the learning process.

Below are the most common asynchronous tools utilized in online education. The appropriate and effective uses of each tool will be discussed, along with its advantages and disadvantages.

Email

Email is the oldest collaboration tool and the most common method for communication in online learning. Private messages can be sent between the instructor and the student. It is reliable, inexpensive, and the most well-known. Email is often overlooked as a collaboration mechanism in favor of flashier, more expensive, and less reliable mechanisms. (Horton, 2006, p. 424).

Advantages: Email requires minimal technical skills, and it allows private communication between the instructor and student. Broadcasts for urgent class announcements can be sent via email. Assignments can be easily attached, and instructors can provide almost immediate feedback to students. Graduate students in a study by Johnson and Huff (as cited by Repman, Zinskie, & Carlson, 2005, p. 59) noted that email technology made the instructor seem more accessible.

Disadvantages: Students may begin to rely too heavily on the instructor for one-on-one instruction or for information about assignments and material already available on the course site. Therefore, it is important to set guidelines for email use within the course syllabus. In addition, set reasonable expectations for when you will respond to emails, for example within 24-48 hours.

Uses: Email can be used for announcements, due dates, schedule changes, modification to an assignment, or to address possible misconceptions. Use *private* email for feedback on individual assignments and projects, and to answer student questions that are of a personal nature such as a family crisis, a grade concern, or conduct in a discussion forum.

Email Tool in Blackboard: From the Control Panel, select the “Course Tools” tab, select “Send Email.” A tutorial video on email functions can be found under the “Communication” tab in the Blackboard Support for Faculty course.

Discussion Boards/Forums

Discussion boards or forums are an asynchronous collaboration tool and a key element in learning management systems. Through discussion boards, the student interacts with the course content, the instructor, and other students. Generally, the instructor posts a topic or thread for discussion, and the student replies to the instructor and responds to other student postings. Postings are archived allowing the professor to track participation and quality of student contributions. Bender (as cited by Repman et al., 2005, p. 61) notes other uses for discussion boards such as “role-playing, exchange of written work, debates, sharing of resources such as course-related Web sites, and interaction with guest experts.”

Advantages: Students reluctant to speak up in face-to-face discussions can find their voice in online discussions. Students have time to reflect upon and research their responses providing

higher quality online discussions. Lapadat (as cited by Repman et al.) found asynchronous discussion participation enhanced higher order thinking skills.

Disadvantages: Some students fail to participate in online discussions. Grading online discussions can be time consuming and challenging for the online instructor. Also, if guidelines for discussion postings are not clear, student responses may be trivial not furthering the discussion.

Guidelines: Encourage participation and set clear guidelines for discussions such as what accounts for quality and quantity. Include online discussion participation as a percentage of the overall grade. Suggested guidelines to provide the student are below:

Discussion Guidelines

- Do the appropriate preparation. Complete reading and lesson activities before you join the discussion.
- Keep your messages short and brief – one to two paragraphs is adequate. Postings should be free of misspellings and grammatical errors.
- Take time to organize your thoughts before posting. Provide only the most essential information in your post. If people want further details, they'll ask for them in a reply.
- Avoid discussion posts that offer little more than "I agree." Each discussion posting should offer some new content, aimed to foster continued exploration of the topic.
- When replying to a message, please use the same "subject" line so that people will find it easy to follow the "thread" of a topic. Once you read the discussion topic, please post your ideas using "Reply" button.
- Respect others' ideas and opinions. Feel free to disagree, but express your disagreement in a respectful manner.
- Do not wait until the last minute to post your opinion.

Uses: Effective discussion boards are structured content discussions designed to pose insightful questions, inspire curiosity, and incite discomfort.

Types of Discussion Boards:

Structured Content

Students will contribute to x number of asynchronous discussion topics throughout the semester regarding assigned reading and content. The instructor will pose the question, and students will respond thoughtfully to the posted questions and to student postings. Additionally, the student will pose questions that enhance the discussion.

Questions & Answers

Whenever students have questions or ideas about a topic, they can use the questions and answers discussion board to seek answers and input from their peers and the instructor. Students should be encouraged to answer questions posed by their classmates. The instructor may post answers to questions asked in private emails if they are of general interest to the class.

Student Lounge

Students can correspond with each other about the course or non-course related subjects.

Discussion Tool in Blackboard: To access the Discussion Board tool, select "Discussion Board" tab, "Create Forum" tab. Name the forum and provide a description. A tutorial video on how to use the discussion board can be found under the "Communication" tab in the Blackboard Support for Faculty course.

Blogs/Weblogs

A blog, also known as a web log, is an on-line journal that can be made public or private. Students can use blogs to create an online portfolio, post reflections, turn in projects or assignments and receive feedback from the instructor or other students. Postings are in reverse chronological order making themed discussions easy to follow. “They can serve as collaborative writing spaces where students share ideas and work together to jointly express ideas. Blogs have served as reader’s guides for literature study, as newspapers, or as project sites where students contribute the content” (Repman et al., p. 62).

Advantages: Blogs provide a dynamic source of information rather than static information found in publications (Repman et al.). Blogs promote collaboration and allow the instructor to invite experts, community leaders, and others to review student literary works and projects. Ricardson (as cited by Repman et al.) found students were positively affected knowing they were writing for a community that extended outside the classroom. Blogs offer students the opportunity for self-expression and the potential to develop reflective and critical thinking skills (Mason et al., 2008).

Disadvantages: There is still debate on the effectiveness of blogs as a learning tool. “The flexible, informal nature of blogs can be a disadvantage in terms of maintaining focus and fostering deep, critical thinking” (p. 62). Some students may be reluctant to share personal thoughts and feelings fearing scrutiny from peers. Careful course design is important to motivate students to participate and not just lurk (Mason et al.).

Uses: There are many educational uses for blogs; the most significant is knowledge sharing in content areas. Blogs can provide opportunities for students to network with experts in their field of study (Anderson, 2008). Blogs can act as a learning management system where assignments can be posted and submitted, and announcements and links to others readings are made available.

Blogs are used successfully in creative or reflective writing courses, and in courses that require journals or e-portfolios. And they also provide students with experience in real-world digital knowledge management, working with groups, and information sharing (p. 154).

Blog Tool in Blackboard: From the Control Panel, select the “Course Tools” tab, select “Blogs” and “Create Blog.” A tutorial video on how to use the blog tool can be found under the “Communication” tab in the Blackboard Support for Faculty course.

Wikis

Wikis are a Web-based tool that allows the instructor and students (many authors) to work on projects together, share resources, and collaborate. Wikis have become “an effective tool for generating and sharing large amounts of complex knowledge” (Mason & Rennie, 2008, p. 105). The most noteworthy feature of wikis is the open editing function to allow users to co-create information and knowledge, supporting a constructivist, learner-centered perspective. This feature allows wikis to be “communally constructed and owned” (p. 105).

Advantages: Wikis are free. Wikis can include sound, images, and text. Access to a site can be controlled with a password. Very little training or technical skills are required to participate in a wiki allowing the learner to focus on the content. Mason et al. (2008) also noted the following strengths of wikis:

The ease and accessibility of the resource encourages wikis to be utilized for building common agendas, problem solving, brainstorming, and creating complex reference lists of

hyperlinked information. In addition, the medium is ideal for creating group cohesiveness and commonly agreed definition or information sources among online communities (p.106).

Disadvantages: Some experts contend there is a lack of source credibility and accuracy of the wiki content. Educators contend wikis provide an opportunity for students to learn to decipher for themselves the relevancy and accuracy of information. With so many authors contributing to a wiki site, it can possibly become difficult to navigate. Students new to the wiki environment may accidentally delete the work of other students.

Uses: The valuable use of a wiki is group project work. Work within wikis must be authentic and problem-based. The intention should be to enhance critical thinking skills and work toward a common goal to solve complex problems. Because students may be lost when first working within a wiki, it is important to provide clear instructions and expectations. Below are suggestions for wiki etiquette (Murphy, 2010):

1. Never post your personal information or information about someone else.
2. Write things you know to be correct using facts from research from reliable, credible sources. Make sure your information is accurate.
3. Ask an artist's permission to post their photos, pictures or pieces of writing. Never use first and last names of people that could identify them in a photo or video.
4. Be courteous and be positive in your interactions with your peers.
5. Use breaks in your text and formatting elements to make the page easy to read and understand.
6. Be sure to follow the directions that are given for the assignment — be creative, but within the parameters set forth on the page.
7. **Do not delete the work of others deliberately.** Unless it is part of the editing process.
8. **Keep it on topic - classroom oriented.**

Podcasting

Podcasting is broadcasting a series of audio and video files over the internet “using syndication feeds for playback on mobile devices and personal computers” (Mason et al, p. 92). “The term podcasting is a combination of iPod (Apple Computer’s portable media player) and broadcasting” (p. 107). Podcast aggregators such as iTunes or iPodder software are computer programs which subscribe to an RSS (Real Simple Syndication) feed through a hyperlink. The hyperlink checks for information germane to the subscriber (Anderson, 2008).

RSS is heavily used for delivering news items, comments, descriptions, or images to subscribers, and enables the personalization of news items, by allowing a user's computer to fetch information that is of interest, using their PC, notebook, PDA, or mobile phone. This information can be tracked and personalized, using RSS (p. 155).

Audio files are in MP3 format, and frequently, the terms iPod and MP3 player are used synonymously. Podcasts offer a richer environment and a different modality of learning than just text.

Advantages: Students can listen to course lectures several times and at their convenience. Podcasts are portable and can be listened to anywhere, while traveling or working out. Mason et al. notes “the spoken word can influence both cognition (adding clarity and meaning) and motivation by conveying directly a sense of the person creating the words” (p. 108).

Disadvantages: Preparing a transcript of the audio for hearing impaired students increases the workload for the instructor. Audio is difficult to browse, and audio is not the best format

for relaying comprehensive, complex information that requires focused attention and concentration. Copyright can become an issue.

Uses: Gatewood (2008) suggests the following applications for podcasting in educational settings (p. 92):

1. **Using Existing Podcasts as Curriculum.** Podcasts can supply an almost endless variety of content in audio and video form. The technology gives instructors another instructional tool that can be used to communicate effectively with their students. The option is especially useful for addressing the needs of students who prefer audio or visual learning. They can be used to introduce new material, support current lessons, or review material covered in class.
2. **Creating Podcast Presentations.** Teachers can record lectures, lab directions, project overviews, and review material—and make it all available for students to download to their computers and portable devices. Students can create podcasts to demonstrate their understanding of content, for digital storytelling, to learn to speak effectively, and for presentations, among many other uses. Podcasts enable students to assume a meaningful role in their own learning, and allow student one more way to express themselves.

E-Portfolios

E-portfolios, also referred to as e-folios, are collections of student work stored in digital format (Canada, 2002). E-portfolios provide “a means of collecting and maintaining evidence for assessment online” (Fee, 2009, p. 183). They often have a reflection aspect, similar to blogging, and can include podcasts. Thus, within e-portfolios is a convergence among several types of social networking media (Mason et al., 2008).

Advantages: E-portfolios serve as a record of achievements, “a comprehensive resource on which to draw for job interviews and promotions” (Mason et al., p. 110). At the course level, learners are encouraged to reflect and find new ways to relate and integrate the course material. Most e-portfolio software allows different levels of access for the teacher, other students, and potential employers. E-portfolios allow students to assess their own work and the work of peers, which furthers student skill development in self-assessment and evaluating the work of others.

Disadvantages: The primary challenge has been in motivating students to maintain their e-portfolio (Mason et al., 2008).

The challenge is partly because of the tension between institutional control and student ownership of the e-portfolio. When the institution hosts the software and insists on its use for either assessment or accreditation, the student does not take ownership of the process (p. 109).

Thus, it is important for educators to engage the learner to maintain their e-portfolios and understand their inherent value.

If e-portfolios are used as the primary method of assessing the student, the student may view it as simply a course requirement and not a life learning tool. Another disadvantage of e-portfolios is that they can become repositories for “odd bits and student work,” not providing evidence of student learning (p. 111).