Increasing Interaction in Online Learning Environments

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In my experience as an online learner, some courses I’ve taken virtually have been lacking in opportunities for interaction. My online learning experiences have mainly consisted of reading texts posted by the instructor, listening to lectures, and participating in asynchronous discussion boards. Many of you may have had similar experiences as online learners.

If you spent time in a traditional classroom where students rarely interacted with one another or with the teacher, you would likely deem the instruction as poor quality teaching. However, this somehow seems to pass muster in many online courses and programs. All learners crave interaction, whether in face-to-face settings or online environments, and research shows that interaction can increase learning and lessen the psychological distance involved in online learning (Mayes, Luebeck, Ku, Akarasriworn, & Korkmaz, 2011).

While creating opportunities for interaction may occur without much planning in a face-to-face environment, designing and implementing interactive learning experiences online requires strategic planning. After conducting a thorough review of current literature on the qualities of effective online teaching, I’ve identified strategies that can increase interaction in online learning environments. These strategies are organized by the three types of interaction defined by Moore (1989):

- Learner-instructor interaction
- Learner-content interaction
- Learner-learner interaction

Learner-Instructor Interaction
Interaction between the instructor and learners has been found to be the most important type of interaction in online environments. Frequent interaction with the instructor helps learners feel a greater sense of community and leads to higher levels of student engagement (Brinthaupt, Fisher, Gardner, Raffo, & Woodard, 2011; Mayes et al., 2011).

Shackelford and Maxwell (2012) identified seven types of learner-instructor interaction:

1. **Providing information on expectations**

Online instructors need to communicate their expectations for online participation as well as course procedures. One easy way to do this is by creating a weekly screencast or podcast to model and explain expectations for online learners.

2. **Participating in discussions**

When instructors are absent from online discussions, learning and engagement are low (Journell, 2008). Just as in face-to-face discussions, online instructors need to provide guidance and feedback to help shape the conversation and keep it connected to key learning outcomes.

3. **Providing support and encouragement**

Providing encouraging feedback doesn’t necessarily need to take extra time, as it can be woven into content-related feedback. Online instructors can use text, audio, or video to provide encouragement to students.

4. **Providing timely feedback**

Learners in traditional classrooms get ongoing feedback through verbal and nonverbal cues, which are missing in online settings. Synchronous class meetings provide a good opportunity for online instructors to give general feedback to the class, while emails, podcasts, blog comments, and discussion board replies allow for individual feedback.

5. **Using multiple modes of communication**

Using a variety of communication types increases the likelihood that learner preferences will be met. Online communication can happen via synchronous class meetings, one-on-one virtual meetings, emails, blogs, asynchronous discussion boards, podcasts, wikis, and screencasts

6. **Instructor modelling**

Of these seven types of learner-instructor interaction, instructor modelling was found to have the largest impact on students’ sense of community. Again, instructors model frequently for learners in face-to-face classrooms, but this modelling must be more
explicit online. Instructors can use tools like screencasts and podcasts to model skills and concepts for online learners.

7. Required participation

Requiring students to participate in online discussions and other learning activities ensures that all students will have access to interaction with the instructor.

Learner-Content Interaction

In online learning environments, instructors must balance the desire to provide students with a wealth of content with the need to avoid overloading students with excess content (Garrison & Anderson, 2003). Effective online instructors carefully consider each piece of content that is provided for students and design opportunities for students to engage with content. Collaborative project-based learning (PBL) can be an effective way to get students interacting with meaningful content.

Working in project-based learning teams allows students to collaborate with their peers, share their work with others, and connect to real-world experiences (Schweizer, Whipp, & Haylett, 2012).

In his ISTE 2013 presentation entitled Empowered: Blended Learning through PBL, Andrew Miller (@betamiller) shared the following tips for designing PBL for online and blended learning environments:

Develop a network of experts – Find PBL colleagues you can go to for ideas, support, and collaboration.

Establish benchmarks and formative assessments – Build formative and benchmark assessments into the PBL design to help you and students monitor their progress toward learning outcomes.

Be flexible – Design an online curriculum that is structured, yet flexible enough to meet individual student learning needs.

Align online content to the project – Be selective in choosing content for PBL, and provide guidance in understanding and using the content.

Teach and assess collaboration skills – Be explicit about your expectations for collaboration within PBL, and model them for students.

Use synchronous online class meetings for collaboration, not content delivery – Rather than spending virtual class time lecturing, which tends to disengage students, use this time to get students working with their PBL teams.
Learner-Learner Interaction

Numerous studies have shown that the quality of learner-learner interactions matter more than the quantity of interactions (Garrison & Cleveland-Innes, 2005; Journell, 2008). While online learners need multiple opportunities to interact with one another, it is more important that the instructor design quality interactions than numerous interactions.

One way to facilitate learner-learner interaction is allowing students to facilitate class discussions, either synchronously or asynchronously. Prior to having students facilitate discussions, the instructor should teach and model how to lead an online discussion, gradually releasing responsibility for facilitating discussions to students. Researchers recommend using a variety of groupings for interaction, such as whole class and small group discussions, partner assignments, and individual responses (Mayes et al., 2011).

During both synchronous and asynchronous discussions, students can break out into smaller groups to engage in deeper conversations about the topic of discussion before coming back together with the whole class to share and reflect on small group conversations. Beyond the asynchronous discussion board and synchronous class meeting, there are endless possibilities for using web tools for learner-learner interaction online. Below are a few possibilities to consider.

- **VoiceThread** allows anyone to create a multimedia slideshow and have multiple people comment on the slides. Collaborators can leave text, voice, or video comments. Students can comment on each other’s slideshows to engage in a conversation around the content on the slides.
- **Twitter** chats, 1-hour conversations on topics of interest to participants, provide an opportunities for real-time conversation. Chats can be designed to involve only course participants or to reach out to others beyond the course to gain new perspectives and expertise.
- **Watch2gether** provides a setting where students can watch a YouTube video together online and engage in a synchronous chat while viewing the video. Rooms in Watch2gether are private, so the only people who can join the discussion are those who have been invited.

Whether you teach fully online courses, blended courses, or web-enhanced face-to-face courses, consider these ways to increase learner-instructor, learner-content, and learner-learner interaction. I’d love to hear your ideas for creating interactive learning experiences for students. Feel free to leave a comment to share your ideas.
References