

# **Best Practices**:

#### Interaction in Online Classrooms

### What is it?

Online learners require relevant and dynamic interactions (e.g., observing, reflecting, doing, communicating) to foster high-quality learning experiences. Interaction is an important pedagogical approach in both face-to-face and online classrooms (Moore, 1989). Moore defines interaction as an active process of intellectual participation that requires learners to construct knowledge using higher-order thinking skills, such as problem-solving, analyzing, and critical thinking. Moore posits that there are three types of interaction in the classroom: student–content, student–teacher, and student–student.

## Why should I consider it?

Research posits that providing opportunities for interaction in online learning environments promotes increases in learning outcomes, learner satisfaction, and sense of community among online learners (Kuo et al., 2014). Further, Cole, Shelley, and Swartz (2014) describe lack of interaction as a primary source of dissatisfaction within online courses. Accordingly, interaction in online learning environments significantly impacts students' perception of the overall quality of instruction and the learning experience (Martin & Bolliger, 2018).

### **Tips and Tricks**

#### Student-Content Interaction

To promote student–content interactions, online teachers can provide learners with: (1) choices to foster deep learning and (2) supplemental resources that reach various levels of understanding (Salmon, 2013). Additional strategies to foster student-content interaction include:

- **Student choice.** Design and scaffold opportunities for learners to choose what to do and how to do it (Henrie, Halverson, & Graham, 2015; Salmon, 2013).
- **Emotional engagement.** Design learning tasks that engage learners' emotions and allow for personal and visceral responses (where relevant). Engaging learners emotionally increases their motivation to learn (Salmon, 2013).
- Multimedia. Represent information in multiple formats using combinations of visual, audio, and kinesthetic (VAK) methods. Multimedia representation is popular in online learning as a dynamic means of engaging with content (Salmon, 2013).



- Model. Provide examples and models of learning activities to demonstrate performance expectations for online learners (Henrie et al., 2015; Salmon, 2013).
- Active learning. Design online learning tasks that are active (i.e., discussing, problem solving) rather than passive (i.e., reading PowerPoint slides) to incentivize learner engagement. Interactive tasks that scaffold knowledge and offer opportunities to test ideas are highly valued student learning experiences (Salmon, 2013).
- **Knowledge co-creation.** Encourage learners to co-create knowledge and understanding as they work toward becoming "knowledge creators" (i.e., creating content together) (Salmon, 2013).
- Authentic learning. Utilize real-world projects and structured or guided discussions (Martin & Bollinger, 2018).
- Collaborative technology. Employ quizzes, blogs, wikis, discussions, collaborative projects, etc. (Salmon, 2013).
- **Student-generated content.** Challenge yourself not to use a single PowerPoint slide throughout the module. Instead, use student-generated content as your "presentation" (Salmon, 2013).
- Support autonomy. Provide supporting materials for tasks in a variety of forms (i.e. multimedia) to support student selection and autonomy. When asking students to select material or respond to tasks, allow for a range of response types (Henrie et al., 2015; Salmon, 2013).

#### Student-Teacher Interaction

Student-teacher interactions in online classrooms move beyond the traditional lecture-based teaching framework. The three dimensions of student-teacher interaction in the online classroom are (1) providing feedback, (2) procedural interactions, and (3) social interactions (Moore, 1989). The applications below demonstrate how to implement student-teacher interactions in your online classroom.

- **High expectations.** Set high expectations by providing substantive, holistic feedback and following through. However, keep in mind that it is not necessary to assess all components of online learning (Henrie et al., 2015; Salmon, 2013).
- Timeliness. Provide feedback, answer learners' questions, and grade assignments in a timely manner (within 24 hours) to maintain consistency in the online learning environment (Rios, Elliott, & Mandernach, 2018).
- Clear course structure. Organize the course using a consistent structure that is easy to understand (Young & Bruce, 2011).
- Accessibility. Clearly state the online classroom rules and procedures and make them accessible to learners (Young & Bruce, 2011).
- Instructional tutorials. Provide tutorials for how to successfully navigate online learning features to help learners have a savvy start in the online classroom (Rios et al., 2018).



- **Teacher participation.** Participate in the discussion board as a way to motivate students to complete their discussion assignments on time. Teacher participation also serves as a model to guide learner interaction (Rovai, 2007).
- Learner participation. Include learners in the learning design process to help them feel valued and involved. Demonstrate a flexible and responsive approach that values learners' input. Encourage learners to provide suggestions, make requests and offer feedback regarding online learning tasks (Henrie et al., 2015; Salmon, 2013).

#### Student-Student Interaction

Student–student interaction takes place between two learners or among several learners during classroom discussion or as they work jointly on a project (Moore, 1989). Valuing student–student interaction acknowledges next-generation pedagogy, which views teachers as guides and coaches. The pedagogy of online learning moves away from traditional teaching models of the teacher as an expert whose purpose is to transmit knowledge (Prensky, 2010). Rather, online learning environments where teachers are guides offer learners the opportunity to co-construct knowledge and meaning (Salmon, 2013). Research in K-12 online learning environments has reported the beneficial impact of learner–learner interaction on a variety of variables, including dropout rates, learning achievement, and minimizing racial differences and feelings of isolation and stress (Gunawardena, Linder-VanBerschot, Lapointe, & Rao, 2010). The following applications can foster learner–learner interaction in the online classroom:

- Peer-to-peer. Encourage peer-to-peer and tutor interaction (Salmon, 2013) through discussion, debate, role play, scenario building, team projects, and other collaborative activities (Dailey-Hebert, 2018).
- **Content creation.** Create opportunities for learners to co-create and co-produce learning content (Dailey-Hebert, 2018).
- Community of practice. Establish collaborative communities of practice that invite a sharing
  of expertise from both learners and outside experts (Dailey-Hebert, 2018).



### References

- Cole, M. T., Shelley, D. J., & Swartz, L. B. (2014). Online instruction, e-learning, and student satisfaction: A three-year study. *The International Review of Research in Open and Distance Learning*, 15(6), 111–131.
- Dailey-Hebert, A. (2018). Maximizing interactivity in online learning: Moving beyond discussion boards. *Journal of Educators Online*, 15(3), 3.
- Gunawardena, C. N., Linder-VanBerschot, J. A., LaPointe, D. K., & Rao, L. (2010).
   Predictors of learner satisfaction and transfer of learning in a corporate online education program. *American Journal of Distance Education*, 24, 207-226.
- Henrie, C. R., Halverson, L. R., & Graham, C. R. (2015). Measuring student engagement in technology-mediated learning: A review. *Computers & Education*, *90*, 36-53.
- Kuo, Y. C., Walker, A. E., Belland, B. R., Schroder, K. E., & Kuo, Y. T. (2014). A case study of integrating Interwise: Interaction, internet self-efficacy, and satisfaction in synchronous online learning environments. *The International Review of Research in Open and Distributed Learning*, 15, 1.
- Martin, F., & Bolliger, D. U. (2018). Engagement matters: Student perceptions on the importance of engagement strategies in the online learning environment. *Online Learning*, 22(1), 205-222.
- Moore, M. G. (1989). Three types of interaction. *American Journal of Distance Education*, 3(2), 1–4.
- Prensky, M. R. (2010). *Teaching digital natives: Partnering for real learning*. Corwin Press.
- Rios, T., Elliott, M., & Mandernach, B. J. (2018). Efficient instructional strategies for maximizing online student satisfaction. *Journal of Educators Online*, 15(3), 3.
- Rovai, A. P. (2007). Facilitating online discussions effectively. *Internet and Higher Education*, 10, 77–88.
- Rubin, B., Fernandes, R., & Avgerinou, M. D. (2013). The effects of technology on the community of inquiry and satisfaction with online courses. The Internet and Higher Education, 17, 48–57
- Salmon, G. (2013). E-tivities: The key to active online learning. Routledge.
- Young, S., & Bruce, M. A. (2011). Classroom community and student engagement in online courses. *Journal of Online Learning and Teaching*, 7(2), 219-230.