Synchronous and Asynchronous Interactions

Online learning can add flexibility for instructors and students by focusing synchronous interactions just on the areas where they have the most impact on learning. To leverage this, instructors should consider which course activities require face-to-face time, and which can be asynchronous. For example:

- **Lectures** delivered asynchronously may improve learning by allowing students to pause to take notes.
- **Tests and quizzes** completed remotely can be graded automatically, saving instructors valuable time.
- **Assignment directions**, often delivered orally by instructors during class, are more useful in writing, where students can refer back to them.
- **Discussions**, when conducted asynchronously, may achieve higher participation and offer students the opportunity to think through what they want to say before they start to respond.

Allowing students to complete these activities on their own schedules enables instructors to reserve synchronous time for intensive interactions where immediate feedback is important, and it enables students to have more informed, better-directed conversations.

Planning is essential to ensuring the success of online synchronous interactions. This includes both:

- Having **a coherent lesson plan** that spans the asynchronous and synchronous elements of the course.
- Making sure that all participants' **technology and environment** are conducive to a good experience.

MEHP Online's recommended best practice is to ask students to prepare for the synchronous interaction by engaging with the asynchronous elements of the course in advance. Lectures and readings inform students, and asynchronous pre-activities prime the pump for an active synchronous discussion.
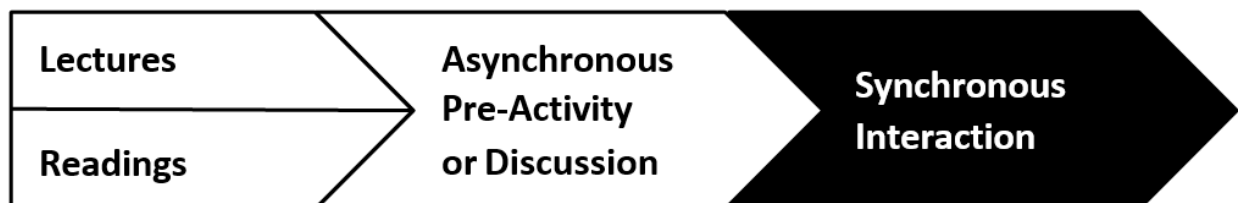
Figure 1 Students complete lectures and readings and engage with asynchronous pre-activities in preparation for the synchronous interaction.

Instructors should prepare guiding questions that build on work students have already done while pushing beyond what they have articulated in the asynchronous portions of the course. As with an in-person class, the goal is to create an environment where students can learn from the instructor and from each other.

Where synchronous interaction is infeasible, most of this work can be achieved asynchronously through:

- **Instructor participation in discussion forums.** Excessive participation can dampen student interactions, but commenting after students have completed the assignment, and asking them to respond, is one useful strategy.
- **Multimedia interactions** using tools like VoiceThread that integrate with the LMS allows asynchronous, threaded interactions that facilitates engagement for students who may have especially challenging schedules.
- **Instructor Q&As** allow students to ask questions in a discussion forum and instructors respond either in writing or with a video; this is especially useful when content clarification is the priority.

Best Practices for Online Synchronous Interactions

Useful advice for students and instructors, before and during a synchronous interaction.

- **Before each synchronous interaction, update and test your technology.**
  - Update your computer's operating system, web browser, and videoconferencing software.
  - Test your computer's webcam, speakers, and microphone.
  - Use a headset to improve audio quality.
  - Test your settings and connection with a practice videoconference.
- **Minimize virtual and real-life distractions for yourself, your students, and your classmates.**
  - Find a quiet place from which to participate.
  - Close non-essential programs on your computer, including extraneous browser tabs.
  - Adjust your webcam angle and room lighting (backlighting, especially, can cast you in a shadow and make you difficult to see).
  - Minimize multitasking, both virtual and physical.
- **Be courteous and collegial during the synchronous interaction.**
  - Mute your microphone until you are ready to talk.
  - If you are using a telephone, minimize disruptive echoes by refraining from using speakerphone.
  - If possible, turn your webcam on to create a more collegial atmosphere.
  - Avoid disruptive crosstalk; use your videoconference app's chat feature to make any necessary side comments to classmates.

Leading Synchronous Interactions

Advice for instructors leading a class.

- **Be transparent about the goals and plan for the class.**
  Preview the topic in weekly reminders and be clear about what you would like students to prepare before they attend. Then, at the start of the class, reiterate the topics you intend to cover.
- **Come prepared with guiding questions.**
  Given your goals for the synchronous class, consider what questions are most likely to start a conversation—and to restart a conversation in the event of a lull. Ask students to reflect on their work and consider what topics will be most impactful when presented face to face.

- **Be comfortable with silence.**
  Even prepared students need to pause and think before they speak. One effective strategy for more focused and lively conversations the minute paper:
    1) Introduce a topic.
    2) Ask students to make notes.
    3) Ask students to share their ideas, based on what they have written.
  Another effective strategy is the waterfall chat:
    1) Ask students to answer a question in the chat, but not hit send.
    2) Once students are ready, ask them to send their answers all at once.
    3) Read stand-out answers out loud and ask students to comment.
- **For classes with large attendance, ask students to form a queue to speak in the chat.**
  Ask students to indicate that they have a comment by asking them to write their names in the chat box, or to use the raise hand function. Both are effective participation strategies for calling on students one at a time.
- **Make recordings available for students who cannot attend live.**
  Students in virtual classrooms have real-life obligations that sometimes conflict with synchronous time. Allowing students to watch a recording of the class later provides additional flexibility.
- **Ask students to reflect on their experience.**
  Whether students participate live in a synchronous interaction or watch the recording, asking them to write a brief reflection can help students cement new knowledge and consider their next steps.