

COMMENTARY

A central decision in online course design: To go synchronous or asynchronous?

Ann-Marie R. Castille

Nicholls State University

Corresponding author. Email: ann-marie.castille@nicholls.edu

Many instructors of online courses in industrial-organizational (I-O) psychology are faced with the challenges of teaching soft skills (e.g., teamwork and business presentation) in a virtual environment and must determine whether a synchronous or asynchronous (or a blended) course design is more effective. *Synchronous* online courses are conducted at a specific time in which all participants join over an online conferencing platform such as Zoom or Google Meet, whereas *asynchronous* online courses do not involve scheduled class meetings but are somewhat self-paced by the students, who may watch video lectures or read through course materials to cover the concepts (Skylar, 2009). Instructors can use a blend of the two approaches, for instance, by providing asynchronous recorded lectures and synchronous class sessions for follow-up questions or exercises. When making the decision as to how an online course should be conducted, instructors should consider the opportunities and limitations of these two online course types and which type best fits with their own pedagogical orientations. Research shows no significant difference in student grades or student perceptions of learning across a synchronous versus asynchronous course design (Somenarain et al., 2010); therefore, the instructor/program administrator should consider which approach works best for the specific courses being offered.

In response to Kraiger et al.'s (2022) intention to start a conversation on creating effective online learning environments, this commentary provides ideas for teaching methods in both synchronous and asynchronous courses that may boost student engagement, with a focus on developing teamwork and presentation skills, two of the most expected but least developed skills of I-O graduates (Fink et al., 2010). Both teamwork and presentation skills can be taught in online courses using both synchronous and asynchronous course design; however, the author has witnessed instructors who are hesitant to assign team projects and presentations in their online courses due to perceived technological constraints. Team projects and presentations can seem more challenging to run in a virtual context compared with in a face-to-face context but should not be avoided as virtual teamwork, and virtual business presentations are now very common in professional settings due to the COVID-19 pandemic. Virtual teamwork may even have some benefits over face-to-face collaboration, such as better conflict management (Klonek et al., 2021).

This commentary walks the reader through teaching approaches that can be implemented in a synchronous online course and asynchronous online course in a way that fosters engagement, teamwork, and presentation skills.

Synchronous online courses

Synchronous online courses can be run similarly to face-to-face courses except using conferencing technology such as Zoom or Google Meet (which are free). For a seamless beginning to a course, training on the conferencing platform should be provided to the students, such as a brief tutorial

® The Author(s), 2022. Published by Cambridge University Press on behalf of the Society for Industrial and Organizational Psychology

video demonstrating how to join the virtual class session, send messages through the instant chat, screen share, and join breakout rooms. After all class participants are comfortable using the conferencing platform, the class can proceed as a traditional face-to-face class would except with the benefits of the chat box and recording tools. The synchronous nature of the class session allows for instructors to think on the spot, and the video technology allows instructors to read the reactions of students as they would face-to-face. Synchronous course design also allows instructors to quickly clarify student problems and can improve social presence, allowing students to get to know the instructor better (Lowenthal et al., 2017), which may initiate mentoring.

To enhance engagement in the class session, the instant chat feature in the meeting platform can be used. The instructor can ask the class a question and require that all students send in an answer for participation credit. In a face-to-face class, it generally is not feasible for every student in the class to answer a question verbally. Responses submitted in an instant chat are typically shorter than those on an asynchronous discussion board; however, they are easier to read (Oztok et al., 2013), and thus the instant chat approach may be a more efficient way for the instructor to manage course participation. Having all answers recorded in the chat allows the professor to track participation accurately either on the spot or after class.

If students are trained properly on how to use a virtual-conferencing platform, team projects can be run in synchronous online courses similarly to how they would be run in a face-to-face class. Student teams can join a virtual meeting using the breakout room feature in Zoom or set up their own team meeting in Google Meet. A benefit of using Zoom breakout rooms is that the instructor can pop in to each team meeting to check on progress and answer questions. Instructors may consider dedicating some class time to teamwork, which works well with the flipped classroom approach where students cover the course materials outside of class (possibly by watching video lectures), which frees up class time for team projects. Student presentations can also be conducted in synchronous online classes similarly to how they would in a face-to-face class. Presentations can be performed during the class session over Zoom or Google Meet, which allows the students to share their screen and/or use their camera. The student audience can also be encouraged to ask the presenter questions or send them feedback using the instant chat tool.

Asynchronous online courses

Asynchronous online courses require a very different approach from that used for a face-to-face class. As mentioned in the focal article, this design is not best for instructors who prefer "winging it," as all materials need to be recorded and provided to the students for them to work through at their own pace. Instructors of asynchronous courses typically provide recorded video lectures to the students and may use discussion boards to encourage participation and engagement. Engagement can be promoted during the video lectures if the instructor asks a series of questions throughout the video and requires the students to pause the video to work through the problem and then submit their answers into a quiz or forum. Frequent quizzes or homework assignments, possibly one after each video lecture, may be useful to hold students accountable for watching the videos and paying attention.

Providing asynchronous videos can be used by both instructors and students as a way of maintaining contact and checking in (Lowenthal et al., 2020). EdConnect and Flipgrid are applications that instructors and students can download on their phone or computer to record a short video and share with the class. Comments can be submitted regarding any video posted. Instructors may consider requiring students to share short videos as a way of introducing themselves to the class and/or presenting a project or an assigned portion of the course material. A benefit of students recording their presentations is that they can review the video to assess their own performance and, if dissatisfied, they have the option to rerecord.

In asynchronous courses, team projects can still be assigned as well as student presentations. Teams can coordinate their own team meetings and conduct them via virtual-conferencing platforms at a time that works for them, or they can communicate using email or video updates (which may be best if collaborating across time zones). Presentations can be given either by the student scheduling a time to present to the instructor or recording a video of their presentation and sharing it with the instructors and/or the entire class. This would pair well with a discussion board where other students can comment on each other's presentations and possibly receive points for asking thoughtful questions or providing meaningful feedback.

Conclusion

Program administrators and instructors must make the decision about whether their online courses will be offered synchronously or asynchronously and should consider methods of boosting student engagement, teamwork opportunities, and presentation skills across each type of online course. Teamwork and presentation skills are highly valued skills by employers, and instructors should not avoid assignments intended to develop these skills in their students due to online course design. Virtual-conferencing and video-recording technologies (both available for free) provide the tools needed to conduct team meetings and presentations as well as enhance student participation. Once an instructor determines whether a synchronous or asynchronous course design works best for their course, they may then use the suggestions in this commentary for incorporating team projects, student presentations, and opportunities for student engagement.

References

- Fink, A., Guzzo, R., Adler, S., Gillespie, J., Konczak, L., Olson, T., Beier, M. & Dickson, M. (2010). Consulting and business skills in industrial-organizational psychology graduate education. The Industrial-Organizational Psychologist, 48(2), 34–46.
- Klonek, F. E., Kanse, L., Wee, S., Runneboom, C., & Parker, S. K. (2021). Did the COVID-19 lock-down make us better at working in virtual teams? *Small Group Research*. Advance online publication. https://doi.org/10.1177/10464964211008991
- Kraiger, K., Fisher, S., Grossman, R., Mills, M. J., & Sitzmann, T. (2022). Online I-O graduate education: Where are we and where should we go? *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 15(2), 151–171.
- Lowenthal, P., Borup, J., West, R., & Archambault, L. (2020). Thinking beyond Zoom: Using asynchronous video to maintain connection and engagement during the COVID-19 pandemic. *Journal of Technology and Teacher Education*, **28**(2), 383–391.
- Lowenthal, P., Dunlap, J., & Snelson, C. (2017). Live synchronous web meetings in asynchronous online courses: Reconceptualizing virtual office hours. *Online Learning Journal*, 21(4), 177–194.
- Oztok, M., Zingaro, D., Brett, C., & Hewitt, J. (2013). Exploring asynchronous and synchronous tool use in online courses. Computers & Education, 60(1), 87–94.
- Skylar, A. A. (2009). A comparison of asynchronous online text-based lectures and synchronous interactive web conferencing lectures. *Issues in Teacher Education*, **18**(2), 69–84.
- Somenarain, L., Akkaraju, S., & Gharbaran, R. (2010). Student perceptions and learning outcomes in asynchronous and synchronous online learning environments in a biology course. *MERLOT Journal of Online Learning and Teaching*, 6(2), 353–356.

Cite this article: Castille, A-MR. (2022). A central decision in online course design: To go synchronous or asynchronous? *Industrial and Organizational Psychology* 15, 205–207. https://doi.org/10.1017/iop.2022.18