

Synchronous and Asynchronous Learning

Blended and online teaching utilizes two main forms of instruction: synchronous learning, characterized by “real time” interactions often mediated by video conferencing platforms, and asynchronous learning, learning that occurs at different times and in different places. There are advantages and disadvantages to both synchronous and asynchronous activities related to learner engagement, access to technology, equity, and flexibility. While school or district administration may require the integration of specific types of instruction, the most effective approach may be to integrate these synchronous and asynchronous activities together to meet student needs and take advantage of the opportunities of each unique learning environment.

1. What characteristics define asynchronous and synchronous learning activities in online environments?
2. How do I choose learning activities for both asynchronous and synchronous learning?
3. What should I consider when choosing between asynchronous and synchronous learning activities for online environments?



to Consider

When adopting a blended or online approach to teaching, should class activities happen synchronously or asynchronously? Synchronous learning is learning that occurs simultaneously in “real time,” typically using a video conferencing platform. Asynchronous learning is learning that occurs at different times, often with students working independently and at their own pace. Choosing synchronous or asynchronous learning scenarios may depend on guidance and direction provided by school or district administration. However, if provided with some choice, understanding the advantages and disadvantages of each can help determine ideal instructional approaches.

Synchronous learning enables real-time collaboration and dynamic verbal and non-verbal communication, which is typical of face-to-face classrooms and can help promote personal relationships and class communities. It also allows teachers to give immediate feedback and guidance to individual students, groups, or the entire class. However, synchronous learning also presents challenges, such as equity issues that can arise when students’ use of computers, cameras, and high-speed Internet are required to successfully participate. In situations where students lack needed technology, or when technology fails, classes that rely heavily on synchronous learning may struggle to adjust.

Asynchronous learning is often more flexible, allowing student choice regarding when and where learning activities are completed. It can provide more time for student reflection and promote opportunities for participation. In blended learning, asynchronous learning may be used for “pre-work,” preserving limited class time for activities requiring an in-person, interactive environment. Disadvantages of asynchronous learning include that younger students or students with special needs may struggle, especially without immediate feedback and guidance from a teacher. Asynchronous learning can also feel impersonal and disconnected without live, direct communication between students and teachers.

Integrating both synchronous and asynchronous learning may be more effective than relying wholly on one or the other. Most teachers already blend instructional strategies in face-to-face learning such as direct instruction to introduce a concept or skill followed by independent student work monitored by the teacher. In a similar way, asynchronous and synchronous learning can meet the needs of a blended or online learning scenario. When choosing to implement synchronous or asynchronous learning strategies, consider: (1) the learning objectives - synchronous may be better for higher levels of discussion, collaboration, or performance; (2) technology access - students with limited access may function better in an asynchronous environment; (3) need for engagement - if real-time interaction is needed consider synchronous learning; (4) flexibility - synchronous learning often provides more structure while asynchronous learning maximizes flexibility; (5) equity - consider how each instructional mode benefits or disadvantages students.

KEY Elements