



GUIDANCE FOR CONVERGED INSTRUCTION

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OVERVIEW

Recent events have required us to rethink how we work, teach, and learn, and we must continue to adapt. The pandemic's quick onset required us to pivot to remote instruction quickly and did not give us the time needed to fully consider our options or implement appropriate technologies. As we become more familiar with the methods and impacts of remote/online instruction, we must continue to adapt our instruction to these educational modalities.

This guide will help you identify and confront the challenges presented by different types of remote/online instruction. The document was developed by a group of instructional technology and information technology professionals at Rutgers in consultation with faculty colleagues.

DEFINITIONS

REMOTE INSTRUCTION – Remote delivery of course material that was initially designed to be presented in-person. By Fall 2021, all courses being delivered remotely should have been redesigned for online instruction.

ONLINE INSTRUCTION (A.K.A. ONLINE COURSE) – Presentation of a course that has been purpose-built to be delivered in an online format.

- **ONLINE SYNCHRONOUS DELIVERY** – Online courses that are delivered and attended in real-time.
- **ONLINE ASYNCHRONOUS DELIVERY** – Courses that consist of pre-created content that the students can consume at the time and rate of their choosing.
- **ONLINE MIXED DELIVERY** – Combination of online synchronous and asynchronous delivery; like hybrid, except that the in-person sessions are replaced by online synchronous sessions.

IN-PERSON COURSE – Students attend the course in person with additional material being provided online through LMS and other systems.

HYBRID COURSE – Describes a course that combines traditional in-person learning with online instruction. Hybrid leverages the benefits of both modalities by conducting activities using the most effective method.

CONVERGED LEARNING – Course is taught with a mix of students attending both in-person and online simultaneously.

SYNCHRONOUS DELIVERY – Online courses that are delivered and attended in real-time.

ASYNCHRONOUS DELIVERY – Courses that consist of pre-created content that the students can consume at the time and rate of their choosing.

RECOMMENDED MODES OF INSTRUCTION

In general, the best instructional method has all students attending class in the same way. While in-person instruction is more familiar, online teaching can also be effective when the course is purpose-built.

While “remote instruction”—courses designed for in-person instruction that are then delivered remotely—may be required in emergency situations, the pandemic has been with us for some time, allowing for the development of more detailed plans for how courses are delivered. Online courses should be purpose-built, as should hybrid course online content.

If you need assistance converting to or designing an online course or hybrid content, please contact the [appropriate support group](#).

Converged courses are much more challenging because students are participating both in-person and remotely. Additional planning, resources, training, and practice are required to ensure that students attending online can successfully and meaningfully participate. These challenges make it preferable to avoid their use when possible.

Even if no converged courses are planned, it is important to prepare just in case. Pandemic circumstances could change, or students may be required to quarantine, and a switch to converged instruction may be required.

CONVERGED/HYBRID CHALLENGES

When teaching students who are attending remotely and in-person, it is crucial to consider how to address each of the following issues adequately. If the issues detailed below cannot be addressed, serious consideration should be given to moving the class fully online or canceling it altogether.

CLASSROOM TECHNOLOGY

When possible, classes should be held in designated general-purpose classrooms as these spaces have most, if not all, of the technology required as well as robust support.

If a scheduled classroom is not available or does not suit an instructor's specific needs, it is critical to address the gaps in alternative spaces *immediately*. The pandemic has significantly increased the time it takes to receive new hardware, and staff will need time to install and test the equipment. This must all be completed so there is enough time for instructors to practice using the technology and resolve any remaining issues.

INSTRUCTIONAL SUPPORT

Students who attend a class remotely while other students are in the classroom are at a disadvantage. Even with added technology in place, it can be difficult for them to hear what is happening in the room. It is also difficult for them to contribute because they are not present. It is difficult for the instructor to monitor the students in the classroom and pay attention to remote students' chats and videos.

For this reason, if converged courses are necessary, they will benefit from a teaching/learning assistant who can be an in-class advocate for the online students, especially for larger classes. We recommend that the assistant not be a student in the class as their responsibilities could prevent them from participating fully. The duties of the assistant would include:

- Monitoring the chat and video of other students and notifying the instructor about questions, comments, and issues.
- Reminding the instructor to repeat questions to ensure that everyone in the room and online is aware.

AUDIO REQUIREMENTS

One of the key challenges that remote students face is the inability to participate in the conversation that is happening "in the room." Classrooms should be equipped with microphone(s) that allow for the students attending remotely to clearly hear the conversation that is happening in-person. The instructor and the students in the class should be reminded to speak loudly and clearly to make it easier for everyone to understand. If the remote students are having issues with the audio, the instructor or instructional assistant should either restate or type the comment for the remote attendees. The requirement to repeat comments or questions is cumbersome,

time consuming, and quickly forgotten so it the installation of equipment to allow students to be heard from their seats is preferable.

Conversely, it is important that the students in the room can hear the comments and questions of the students attending remotely. All converged classrooms must have speakers that are loud enough to be heard by the students in the room and placed appropriately to avoid feedback and echo. Students who are attending remotely should be instructed to remain muted when they are not speaking, and the instructional assistant should assist by muting students when required. Remote students should also be encouraged to enter relevant comments in the chat so the instructional assistant can read them to in-person attendees.

VIDEO REQUIREMENTS

Online students should be able to see content being presented and students that are speaking in the room. Video quality must be sufficient to see, and read, all materials that are presented in class. If a dry-erase or chalkboard are being used, the camera installed in the room must be of high enough resolution to allow remote student to read what is being written. If that solution is not practical, a second webcam or document camera can be used to capture what is being written on paper. That camera can then be simultaneously broadcast to both the remote students and through the in-class projector or monitor.

All writing should be large, clear, dark, and bold enough to be easily captured by the camera. The use of a thicker marker is recommended.

In classes where materials are to be shared by remote students, the system must be able to allow the students to present their materials, so they are displayed to those attending in-person.

RECORDING CLASSES

All classes should be recorded, both for students who are unable to attend the lecture and for those students who have accessibility requirements. Since converged classes are being taught online, any number of problems could occur that result in the student needing to watch the video later (time zone differences, internet issues, etc.). Videos can be posted in the LMS systems so that they cannot be easily downloaded, and those same systems have tools that will add closed captioning to address accessibility concerns.

POLLING

Students who are attending remotely must have a mechanism to participate in any polls that take place in the class. Ideally, all students would use the same mechanism to participate, so solutions like PollEverywhere are preferred. However, if circumstances make the use of such a system impractical, polling technology in conferencing systems can be used. In that case, care must be taken to ensure that all students' responses are utilized.

ACCESSIBILITY

All technologies used both inside the classroom and online in a converged class must meet accessibility requirements. With that said, even compliant technologies used in combination with one another can present accessibility challenges. These challenges create barriers for students of all abilities and are likely detrimental to the overall student experience. It is the responsibility of the instructor to ensure the content of their course, delivery method, and technologies used are all accessible. Instructors need to provide accommodations where they are not. The [Accessibility Resources for Remote Instruction](#) site contains information related to the accessibility of individual technologies, best practices for universal design, and other useful resources.

GETTING HELP

As mentioned above, it is critical that instructors practice the use of these technologies before they attempt to use them in a class. Part of that practice should be identifying how you can request help and from whom. All spaces that are being used for instructions should have clear information posted so instructors know who to contact if they need help.

The group that can provide support will depend on your location and individual needs. For additional information or if you need assistance, please visit the:

- [Teach with Technology webpage](#)
- [Help & Support webpage with a list of support contacts](#)

If you have any questions or comments about this document, please contact itcomm@rutgers.edu.