

The Green Zone: Underappreciated Workhorses

Starting with the green zone in the lower left, we have readings with text and images. These types of assignments may not seem exciting, but sharing readings with students in a consistent and organized way provides your online course with a very practical, solid foundation. Email and discussion boards also belong in this quadrant.

Online instructors have been using these three tools—file sharing (for readings and such), email, and discussion boards—for decades. And while that might make them sound boring, you can create some fantastic instructional experiences with just these three tools.

The Blue Zone: Practical Immediacy

Moving over to the lower right, we have low-bandwidth tools that can add immediacy to student interactions. If you've used Microsoft Office 365 or Google Drive, you're probably already familiar with some of the features and benefits of collaborative document editors. These tools allow multiple people to edit and comment on the same document, spreadsheet, or presentation slides. Depending on how you structure your assignments, students could collaborate over an extended period of time, or they could go online at the exact same time and write and edit each other's work simultaneously.

When it comes to group chat/messaging, there are lots of free apps that can be useful in an educational setting. Slack and GroupMe are two popular examples. These mobile-friendly apps allow students to post text-based messages and images without requiring anyone in the group (including you!) to share their phone numbers. These tools allow students to communicate quickly and easily without scheduling an entire day around a formal video conference.

The Yellow Zone: Audio and Video on Demand

Many instructors like to move in-class lectures and demonstrations online by creating screencasts. Screencasting allows you to record what's on your computer screen—from PowerPoint slides to math equations to works of art—and add audio narration as you record. Screencasting adds a human element to online courses because your voice creates a sense of presence that plain text can't.

Learning how to create pre-recorded lectures can be intimidating, especially if you don't have any experience with video production. It can also be challenging to create concise screencasts that keep students engaged. Students are more likely to watch a series of shorter videos than a single, longer video, which is why I recommend instructors try to divide long screencasts into five- to ten-minute segments (whenever possible).

If you'd like to explore a free screencasting tool on your own, Screencast-o-Matic is one that I've been fairly happy with. There are *many* other options available, so I'd recommend talking with the instructional technology specialists at your institution to see what they recommend. At DePaul, for example, we have detailed guides and trainings on Panopto, the screencasting tool and video-management platform integrated with our learning management system. It's also worth noting that you can use a videoconferencing tool like Zoom to record slide narration even if you're the only person in the meeting room. Once you've started a Zoom session, you can press record, share your screen, and *voila*! You now have a recording of you talking over your slides or whatever else you might show using the Share Screen feature. The only major disadvantage to this approach is that you'll have to use a separate program if you want to edit your recording.

The right side of the yellow zone is home to asynchronous discussion with audio and video. If you're not familiar with this concept, I'm referring to discussion tools that allow students to respond with audio and video instead of just text. One tool that's been a leader for a long time in this multimedia discussion space is VoiceThread. While VoiceThread's defining feature is its user-friendly approach to audio-based commenting, it can also be used to create narrated presentations with PowerPoints slides, images, and video. If you find yourself overwhelmed by the interface of a traditional screencasting tool, VoiceThread is worth exploring as a simpler way of recording online lectures and fostering discussions that go beyond plain text.

The Red Zone: Natural Conversations at a Cost

The upper-right quadrant is reserved for tools that require both high bandwidth and high immediacy, and the best examples of this are videoconferencing tools like **Zoom** or **Skype**. Videoconferencing is a great way to engage with students when they truly need to see and hear each other in real time. It can also be useful for online office hours, since it's easier to feel connected and avoid misunderstandings when you have the benefit of tone of voice, facial expressions, and body language.

Unfortunately, videoconferencing is one of the most inflexible and bandwidth-intensive activities we can ask our students to do. Before you rely on it too heavily, look at the other quadrants and ask yourself if there's any other way to accomplish your learning objectives without it.

Conclusions

I like to encourage faculty to start their online-course design process by imagining how they'd structure each week's assignments and activities using only the tools in the green zone. Setting these types of strict limits at the start can make it easier to identify creative solutions. It also helps ensure that when you're ready to consider tools in the other quadrants, you're more conscious of the tradeoffs that come with moving from the lower left to the upper right areas of the chart.

None of this is to say that videoconferencing is inherently bad or that it has no place in an online course. It's simply a reminder that seemingly small (and sometimes unconscious) choices about the technologies we use can have a big impact on how inclusive and effective our teaching is. The more aware we are of this, the more we can ensure we're choosing the right tools for the right reasons.