

Teaching With Asynchronous Video

Strategies for Online Practitioners

Jered Borup & Richard E. West

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Introduction: The Power of Asynchronous Video

Prior to the COVID-19 pandemic, instructors taught courses either fully or partially online, using a wide range of tools to teach and connect with students. When the pandemic abruptly curtailed most in-person learning, the number of courses being taught online grew exponentially. Many instructors turned to videoconferencing tools to facilitate their teaching, perhaps because they offer the most obvious approximation of an in-class experience. Videoconferencing tools allowed instructors and students to engage in real-time interactions while maintaining the same class schedule as before the pandemic. Features such as polling and breakout rooms allowed students to engage in interactive and collaborative activities similar to what they would have done in person. For many instructors and students, synchronous interaction using videoconferencing tools felt comfortable, and for some online learning activities, synchronous video was a good solution.

But many instructors and students quickly recognized that video conferencing came with limitations. Instructors found it was more difficult to engage students prone to distractions. Both instructors and students encountered new technological issues and Wi-Fi limitations when multiple people in a household were simultaneously attending videoconferences. "You're on mute" became the quote of the year, and instructors and students commonly left class feeling exhausted, complaining of "[Zoom hangovers.](#)"

Asynchronous video can help address several of the challenges that instructors and students encountered in videoconferencing. Having worked in online teaching for more than a decade, we have used countless tools and have learned important lessons along the way, particularly in the area of asynchronous video. We have also conducted research into the effectiveness of asynchronous video to promote greater online social learning. In order to assist teachers with incorporating some asynchronous strategies into their teaching, we developed a set of resources to help instructors understand how the benefits of asynchronous video can improve their online, blended, or in-person courses. These resources range from high-level discussions of asynchronous video activities to specific tips on lighting, sound, and the effective integration of video into teaching. These strategies are described in the following chapters.



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Understanding How Asynchronous Video Can Be Critical to Learning Success

Richard E. West

"Ugh, I just finished six straight hours of Zoom calls," my exasperated colleague shared on Facebook.

How many of us feel we could win at videoconference bingo because we do it so much?



Conference Call Bingo from @TwistedDoodles at <https://twitter.com/twisteddoodles>.

During the shutdown of in-person education brought on by the COVID-19 pandemic, "Zoom hangovers" have become acute for many instructors. However, this fatigue is not simply a COVID-19 challenge but is a struggle that many online teachers have long felt. As colleges and universities move increasing numbers of courses into online or hybrid settings, many instructors mourn the loss of personal connections with students. After all, most of these professionals chose teaching in part because they enjoy student interactions. They often find it unsatisfying to instead teach to a computer screen, with less of a personal relationship with students.

The Benefits and Challenges of Synchronous Video



In an effort to develop that connection, many faculty use videoconferencing software, such as Zoom, Google Meet, or Microsoft Teams, because it most closely approximates the in-person teaching experience. Everyone is together at the same time, and the instructor can present ideas, divide the class into breakout rooms, and talk to students "face to face." Synchronous video teaching—video sessions in which everyone participates at the same time—has some powerful benefits, and it does increase the feeling of immediacy and social presence within a class.

However, synchronous video also has serious limitations and cannot be the answer for all online learning. First, it is not convenient for many students, such as those who are at work during class or who live in different time zones. Many of these students seek online learning to find flexibility in how they learn, and synchronous video limits that flexibility.

Second, long synchronous video sessions can be cognitively tiring. Whereas in-person teaching often involves moments of breaking into groups, walking around the room, transitioning from one class to another, and looking away from the professor to take notes during a discussion, during videoconference teaching, all of these things happen sitting in one position, looking at one computer screen.

If done for too long, videoconferencing is a recipe for physical and mental exhaustion. As Suzanne Degges-White wrote, long videoconferencing meetings can be fatiguing: "From a numb butt to an aching back to a dull, throbbing headache and eye strain, hours spent in one position at furniture never designed for long-term sitting can leave us feeling cranky, achy, and a lot worse about life."^{Footnote1}

An Emerging Alternative: Asynchronous Video

How can instructors create the rich, personal connections that benefit student learning without hours of videoconferencing? One strategy is to use asynchronous video. In contrast to videoconferencing, asynchronous video technologies enable students and faculty to record video responses as part of a discussion but without the requirement that it happen at the same time. This means participants can record their videos when and where they want to. It also

means they can view others' videos at a time and place of their choosing, or they can break up how they view the videos so that they have important breaks in the middle of the conversation.

Besides increased flexibility, asynchronous video discussions have been found to have many other benefits:

- Rich conversation-like exchanges
- Increased social presence and feeling of immediacy in a class
- Improved student motivation
- Stronger faculty/student relationships
- Improved collaboration and sense of "trust" of group members
- Easier and better feedback on performance
- Increased participation from some groups of students, such as introverts, who prefer asynchronous interaction

Various research studies have cited these benefits,^{Footnote2} but it is important to note that these studies do not show asynchronous video as a panacea. Indeed, some students appear to prefer text-based discussions. This is not surprising—no two students are the same, and they will have different preferences for how they learn. However, asynchronous video clearly can have a powerful, positive effect in reaching students and developing connections with them in ways that text-based discussions cannot, and it can do this in a much more flexible way than synchronous videoconferencing.

How Can Instructors Use Asynchronous Video?

With any new technology, we may struggle at first to see how asynchronous video can be integrated into our daily work lives. However, we can answer the question of when we could use asynchronous video by first asking "When do I want or need to communicate with others?" If those times of communication require efficiency, often text is faster (although not always—we found in our research that at least sometimes extraverts can feel they communicate faster via video and not everyone is a fast typist). However, if you want to build stronger relationships when communicating with others, and if that communication is at a distance, then asynchronous video may be a great solution. For example, Patrick Lowenthal and his co-authors have discussed how faculty can use asynchronous video as part of their teaching in various ways.^{Footnote3} They list the following:

- Present questions to a class for students to discuss
- Give feedback on an assignment
- Check in on students doing internships or experiential projects
- Have students provide a quick update on their progress on a project
- Conduct an asynchronous review session for a quiz where students ask questions via video and the instructor responds via video for everyone to see
- Provide tutorials or screencast demonstrations of concepts or procedures
- Conduct brainstorming or ideation sessions, given that asynchronous video allows more time for people to compose their thoughts, reducing the likelihood of groupthink
- Improve student advising and mentoring through weekly or biweekly updates
- Improve alumni outreach by asking alumni to record quick video summaries of their work in a discipline or answers to student questions
- Increase consensus development on a team by asking each team member to share their independent thoughts on an issue
- Enable collaboration across countries and time zones
- Facilitate listening to diverse narratives around a social issue, collected separately but available for students to view and discuss
- Hold "water cooler" chit-chat discussions, given that apps such as Marco Polo and TikTok have already created a rising generation of students who interact casually through video in the same way their parents interacted through letter writing or email

Michael Moore, a pioneer in the discipline of online learning, once argued that there are three important types of interaction in an online course (see figure 1). First, students interact with each other. Second, they interact with the course materials themselves. Third, they interact with their instructor. These three types of interaction can be a guide to using asynchronous video effectively in online learning.

Three Types of Interaction

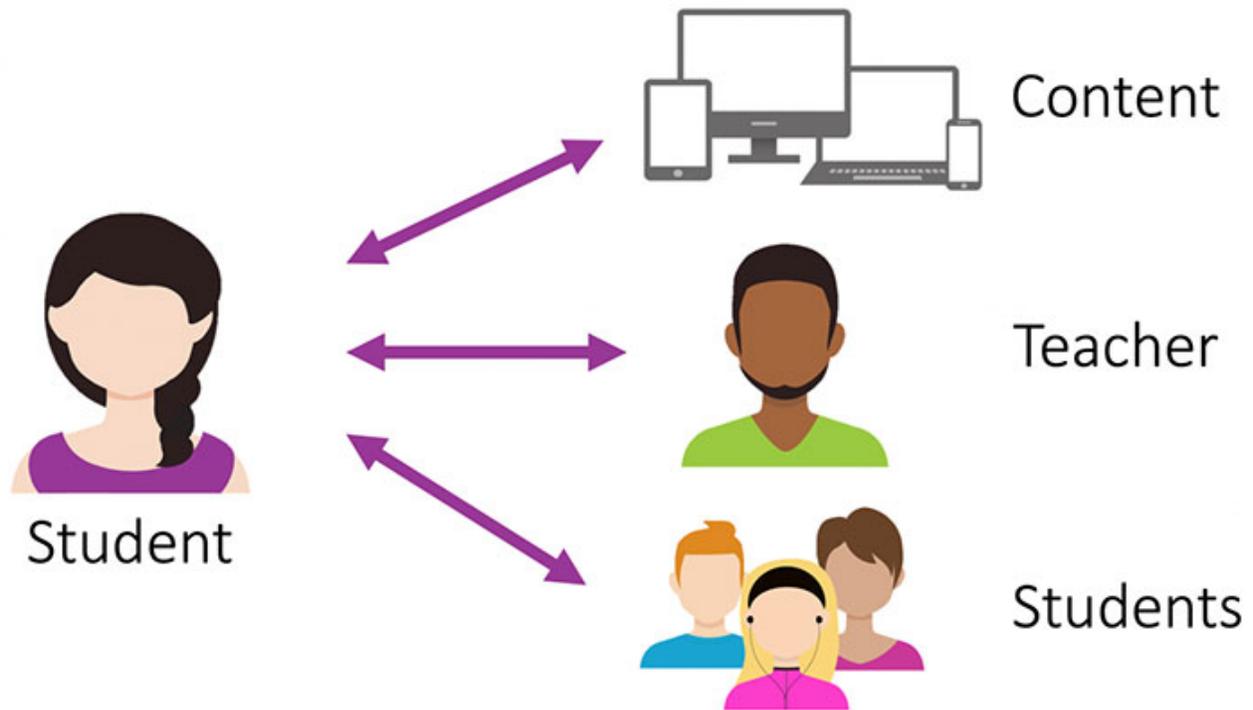


Figure 1. Three types of interactions in online learning (Jered Borup, from [K-12 Blended Teaching, CC BY 2.0](#)).

How can asynchronous video assist online courses? By improving how students interact with the learning content (through viewing content, instead of just reading it), improving how they interact with each other (through discussions, collaborations, and informal talk), and improving how they interact with their instructors (through question-and-answer activities and advising). Asynchronous video is not the only means to do these things, but it can be an effective way to add needed variety to the monotony of text-based discussions and videoconferencing fatigue, while still honoring the flexibility that has made online learning appealing.

Acknowledgment

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Notes

1. Suzanne Degges-White, "[Zoom Fatigue: Don't Let Video Meetings Zap Your Energy](#)," *Psychology Today*, April 4, 2020.
2. Kori Inkpen, Honglu Du, Asta Roseway, Aaron Hoff, and Paul Johns, "Video Kids: Augmenting Close Friendships with Asynchronous Video Conversations in VideoPal," *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, May 2012, 2,387–2,396; Jered Borup, Charles R. Graham, and Andrea Velasquez, "[The Use of Asynchronous Video Communication to Improve Instructor Immediacy and Social Presence in a Blended Learning Environment](#)," in *Blended Learning across Disciplines: Models for Implementation*, ed. Andrew Kitchenham (Hershey, PA: IGI Global, 2011), 38–57; Jered Borup, Richard E. West, and Charles R. Graham, "[Improving Online Social Presence through Asynchronous Video](#)," *The Internet and Higher Education* 15, no. 3 (2012): 195–203; Michael E. Griffiths and Charles R. Graham, "[The Potential of Asynchronous Video in Online Education](#)," *Distance Learning* 6 no. 2 (2009): 13; Michael E. Griffiths and Charles R. Graham, "[Using Asynchronous Video to Achieve Instructor Immediacy and Closeness in Online Classes: Experiences from Three Cases](#)," *International Journal on E-Learning* 9 no. 3 (January 2010): 325–340; Cynthia Clark, Neal Strudler, and Karen Grove, "[Comparing Asynchronous and Synchronous Video vs. Text Based Discussions in an Online Teacher Education Course](#)," *Online Learning* 19 no. 3 (2015): 48–69; and Amy Pavel, Dan B. Goldman, Björn Hartmann, and Maneesh Agrawala, "[VidCrit: Video-Based Asynchronous Video Review](#)," *Proceedings of the 29th Annual Symposium on User Interface Software and Technology*, October 2016, 517–528).
3. Patrick Lowenthal, Jered Borup, Richard E. West, and Leanna Archambault, "[Thinking Beyond Zoom: Using Asynchronous Video to Maintain Connection and Engagement during the COVID-19 Pandemic](#)," *Journal of Technology and Teacher Education* 28 no. 2 (2020): 161–169.



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Teacher, Are You There? Being "Present" in Online Learning

Being "Present" in Online Learning

Richard E. West

What learning experiences have been most substantial in your life? How many of those were special because of the people there with you, assisting you in your journey?

One student, Steven, enrolled in an online program because it fit his work and family situation best. He enjoyed the content of the classes, but mostly he had forgettable experiences and even some frustrating ones. At the end, he could not name any of his teachers or fellow students, and consequently he felt no connection to the university at all—except for one professor. This professor had reached out to him, had conversations with him, and served as a mentor. When Steven graduated, he attended graduation ceremonies mostly to see this one professor, the one who had made a connection.

A common misunderstanding about education is that it is primarily focused on brains, information, and memory. While learning certainly involves attempting to get things to "stick" in our heads, it is much more—it is about change and growth. Education is the learning of new information, yes, but also developing new skills, values, behaviors, feelings (you can "learn to love" for example), culture, and ways of living and interacting with the world. These things are often best learned through relationships, as the Russian psychologist Lev Vygotsky believed, and he argued we first learn things with others before we can internalize them ourselves.

As online education continues to expand, we have learned that effective learning involves human relationships—even if we are not physically together in a classroom. While it is possible to participate in a course in which the student reads a textbook, completes assignments, and takes exams without ever communicating with an instructor, that type of experience is often hollow. Richard Culatta, former director of the Office of Educational Technology for the US Department of Education and current Chief Executive Officer for the International Society for Technology in Education, said, "Learning is inherently social," before adding, "We need to see a shift in using tech less for presenting content and more as a tool to design, create, explore, and connect."^{Footnote1}



**“Learning is inherently social.
We need to see a shift in using
tech less for presenting content
and more as a tool to design,
create, explore, and connect.”**

--Richard Culatta

Video technologies are part of that shift in helping online learners feel connected to teachers and peers. This connection comes from people developing the sense that they are "present" in the class, even if they are not physically in the same room. How is it possible to be present when you are physically separated?

1. Show the Real You

In all human relationships, we feel closer to someone who seems authentic and similar to ourselves. For example, Jimmy Fallon, John Krasinski, and other celebrities were able to expand their popularity during the COVID-19 home quarantines of 2020 by recording their shows at home. Family interruptions, dressing "down," and sneak peaks at their homes ([Jimmy Fallon has a slide!](#)) helped them feel more real and human to their viewers.

As another example, Joe Wicks, [the "Body Coach,"](#) grew astronomically in popularity as he led the world in daily physical education exercises during the home quarantine period. One regular feature of his workout videos was that he would change out the items on the shelves behind him (see figure 1) and invite viewers to guess what was new. He would then describe each item and explain why it was special to him.



Figure 1. Joe Wicks workout at home

For teachers, although it may be inappropriate to share some aspects of our personal lives with students, we can still shorten the distance between us and the students by showing some parts of our authentic selves. One time I was recording a video to my students and my toddler climbed up on my lap, interrupting me. At first I was frustrated by this interruption. However, later my students said, "It's really fun to see you at home. You're like a regular person!" For another example, consider this video of Chris Haskell, a clinical associate professor at Boise State University. How do the items in his background help you understand Haskell as a professional? What about as a person?



Figure 2. Chris Haskell video showing part of his office

Tip! Record videos from different locations in your home, office, or community. While you should be careful not to overdo it, a few seconds showing your personality can make learning fun. As an example, Lloyd Rieber of the University of Georgia recorded introductions to his videos from his farm, sitting next to his favorite cow, before moving on to the

formal instruction parts of the lesson. Years later, students may not remember everything Rieber taught, but they will remember who he was as a person.



[Watch on YouTube](#)

Lloyd Rieber teaching about needs assessment after feeding Anabelle

2. Express (the Right) Emotions

Our eyes, ears, and other senses have evolved to take in a tremendous amount of information each second. Not only do we hear or see what someone has said or shown us; we also notice, unconsciously, details about *how* the message was communicated. For example, a simple statement such as, "I am so happy to see you today!" can carry the opposite meaning if you say it with a furrowed brow, terse tone, rolled eyes, or crossed arms. As another example, animators have become so skillful at using nonverbal communication that an entire story can be told without any dialogue. See, for example, Pixar's popular shorts "For the Birds" or ["Geri's Game."](#)



[Watch on YouTube](#)

For the Birds

Some teachers are skilled at showing emotion in online videos. They smile, get excited, show surprise, lean closer to the camera, and otherwise talk *to the students* instead of to the camera. Students notice this and feel more connected to these teachers. Consequently they are more likely to reach out to those instructors if they have questions or need assistance and to feel more engaged in the courses. As an example, these two student quotes illustrate the connections that are possible in a class where the instructor used asynchronous video:

"It was like he was having a conversation with me even though I wasn't responding. He was talking to me as if I was right there in front of him."

"It seems like we are actually having that conversation even though we're not."

Meanwhile, other instructors are less skilled at showing emotions in their videos, and they come across as disinterested. Students in these classes do not feel the same sense of connection with their instructors and may even prefer text communication instead.

Tip! Your students will be more connected to you if they feel that you are talking to them directly. When recording your video, look at your camera instead of at your screen and imagine the student(s) you are talking to. They are really there... on the other end of the internet! Also, remember to smile, and greet your students when you begin, before launching into your instructional material.

Tip! Just as we can show positive emotions in a video, we can also easily show negative ones. For this reason, be careful not to record a video while you are frustrated—the students will probably notice and might misunderstand what you are trying to communicate.

Practice! Rewatch a video you record for your class, or ask a friend to watch it and provide you with feedback. Try watching it with and without sound. What emotions do you see, or is your video emotionless? (Remember "[Bueller? Bueller?](#)") Are those the emotions you want to express? Now try recording the video again with a different emotional angle. Can your friend pick up the difference? Which would they prefer to see from their instructor?

3. Personalize Your Videos

When we communicate in person, we personalize the way we talk by referring to someone's name, or referencing something we have in common ("Isn't the weather great today? Are you enjoying your walk?"). Using the exact same phrases to talk to everyone, without any variety, would feel awkward. Similarly, in online communications, we can increase the feeling that we are "present" with our students if we customize our communications with them. Undoubtedly, there are times when it is better to be efficient. If most students make the same mistake on an assignment, we might copy and paste a reply to them. If we didn't do this, we might not have time to give them feedback at all, and students appreciate receiving the feedback!

However, when we are trying to establish a connection with students, these canned responses can seem cold and clinical rather than personal. Instead, if we reference shared experiences or specific things about the student we are talking to, that student feels important and understood. For example, an instructor might provide feedback on an assignment by using the student's name and referencing their work or a snippet of a past conversation: "Sara, I remember you said you were from the Midwest, and I loved seeing you reference your hometown in your paper. It made me want to visit! I do have some feedback for you...."

Tip! In large classes, keep a notepad or computer document handy where you can write notes about students so that you can refer to them later. Doing this can help you remember what conversations you have had with which students—it is unlikely that they will forget! Referencing these previous interactions will give the students, and you, a sense of a continuing conversation—one in which they are active participants.

Tip! Sometimes creating video discussions that are not directly related to the content of the class can be really helpful in establishing a positive learning community atmosphere. With in-person learning, teachers will often chit-chat with students before, during, and after class. This casual conversation can be helpful in making students feel noticed and important to the teacher. Online, these conversations need to be created intentionally. Try creating a "chit chat" thread for students to talk to each other and you about off-topic things, or have a weekly thread where you suggest a current-events topic and ask students to record video responses. Be sure to reply to them and continue the conversation! As one example, when the 2020 COVID-19 quarantine began in the United States, I created a thread for students to share short, asynchronous video clips about how they were handling the directive to stay at home, which helped us find the good in the situation. They shared that they enjoyed spending time with family, watching movies, and catching up on sleep, and we developed a greater sense of a shared experience as we talked with each other about the current state of society.

Conclusion

Charles Graham, well known author on blended learning, said, "Many learners want the convenience offered by a distributed environment, and, at the same time, do not want to sacrifice the social interactions and human touch they are used to in a F2F classroom."^{Footnote2} We can increase this sense of the "human touch" in all of our interactions, including through text. However, video has a particular power to convey our humanity. In particular, asynchronous video can provide some of the convenience of online learning without sacrificing the human connection. If we personalize our videos to the students, express emotions, and strive to show them a little of who we really are as people, this can increase the feeling that we are "present" together in the class, even if we are physically separated. This feeling of presence can increase student engagement and satisfaction with the course, as well as students' feeling of connection and appreciation for the instructor.

Acknowledgment

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Notes

1. Richard Culatta, personal communication, December 21, 2020.
2. Charles R. Graham, "[Blended Learning Systems: Definition, Current Trends, and Future Directions](#)," in *The Handbook of Blended Learning: Global Perspectives, Local Designs*, eds. Curtis J. Bonk and Charles R. Graham (San Francisco: Pfeiffer Publishing, 2006), 9.



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Let's Discuss Discussions

Using Asynchronous Video to Improve Online Discussions

Jered Borup

Student discussions are an important part of learning. Discussions allow students to be active participants in constructing knowledge and meaning of the material. In-person discussions can be energizing, with rapid exchanges where students can express both their knowledge of and feelings about a subject. These discussions can be memorable experiences that not only help students learn but also change how they relate to the course material. For instructors, it can be exciting to see students engage in meaningful discussions. However, instructors sometimes overestimate students' engagement in discussions, and whole-class discussions are often dominated by only a handful of students. In-person class discussions favor extroverts and frequently lack the voices of introverts, language learners, and others who require flexibility to reflect and form responses.

In contrast to in-person discussions, asynchronous online discussions allow for more equitable opportunities to participate. The flexibility inherent in online discussions also allows participants to be more reflective in their comments. However, most of these discussions occur using text. Text is helpful for critical thinking but can lack the communication cues that allow participants to connect with the material and other students. As a result, students can feel uninterested and isolated.

Discussions Using Asynchronous Video

In many ways asynchronous video communication can combine the best of in-person and text discussions. Similar to text-based communication, video messages are recorded and allow for high levels of flexibility and participation. Once video messages are shared, students can watch and/or respond to them immediately or when it is convenient. At the same time, they contain the fidelity and communication cues that help make in-person communication powerful.

Instructors should be aware, though, of video messaging's disadvantages. First, recording and posting messages can be uncomfortable for students initially. That said, in our research, students reported that the discomfort they felt tended to decrease significantly after just a few posts.^{Footnote¹} Second, video messaging can be less convenient than text because you need to find a relatively quiet place to record videos and because skimming video is more difficult than skimming text. However, participants in our research tended to find that the benefits outweighed the potential drawbacks in most cases.

Using Asynchronous Video When It's the Best Option

Not all online interactions should take place using asynchronous video. The questions below will help you to determine when to use video and when to use text.

If you answer "yes" to any of these questions, then the use of asynchronous *video* would be beneficial:

1. In part, are you assessing students' ability to speak or present on the topic?
2. Are you hoping that this discussion will help establish a sense of community?
3. Is it important for you to know how students feel about the topic?
4. Do some students in your course have difficulty communicating in text?

If you answer "yes" to any of these questions, then the use of asynchronous *text* would be beneficial:

1. In part, are you assessing students' ability to write on the topic?
2. Are you primarily assessing students' critical thinking on the topic?
3. Is a written record necessary for future review?
4. Do some students in your course have difficulty communicating using video or viewing/hearing video?

It's likely that you responded "yes" to questions in both lists. When that's the case, you may want to create activities that combine text with video comments or provide students the choice of which modality they use to comment.

Types of Activities

In most cases, using a variety of discussion activities throughout a course is beneficial for students and instructors. Table 1 shows a partial list of asynchronous discussion activities.

Table 1. Asynchronous discussion activities

Activity Type	Description
Reflections and Replies	A common activity in online courses is for students to read and/or view material, reflect on it, and then share their thoughts and related experiences. It's also common for instructors to require students to reply to a certain number of their peers' comments.
Round-Robin Reflections	Similar to reflections and replies, in round-robin reflections, students still read and/or view material, reflect on it, and then share their thoughts and related experiences. In addition, students ask a related question that they would like to know the answer to. The next person to post to the group then answers the previous person's question, shares their thoughts and related experiences, and asks a question. This continues until everyone has posted. The instructor might then choose to have the first person who posted return to and respond to the last person's question.
Debates	In many subject areas, debates are a common in-person classroom activity. With some preparation, these debates can also be done online with even more reflection and participation than is possible in person. Just as with in-person debates, the instructor should set the ground rules for communicating respectfully. The instructor can break down the online debate into the different phases and set deadlines for each phase. For instance, one day can be designated for opening statements. Other days could be designated for rebuttals. Lastly, students end the debate with closing statements on the last day.
Check-Ins and Updates	During longer projects or experiences such as practicums or internships, having students post regular updates helps instructors keep a pulse on students' progress. As a result, these updates hold students accountable for their activities even in the absence of a hard deadline. These check-ins also give

Activity Type	Description
	students an opportunity to ask for assistance. Making these posts using video can help students maintain a sense of community.
Jigsaws	In a jigsaw activity, students are placed in a discussion group of about three to six students. Each student is tasked with learning a different aspect of the topic. As a result, in preparation for the discussion activity, each student is focusing on and exploring different materials. Each student then shares their learning with the rest of the group. This allows students to teach one another so that together everyone is able to form a full picture of the topic.
Peer Reviews	Instructors can use asynchronous video to provide feedback . Similarly, students can use video comments to provide their peers with feedback on projects. Students can share links to their project with a video comment describing their work. Students can then review the projects and provide feedback using either webcam or screencast recordings.

Focus on the Prompt

If a discussion you design for an in-person class flops, you can quickly adjust the activity on the fly. Although the same can be true for an online activity, making those changes mid-stream can be more difficult than in an in-person setting. As a result, instructors need to think more carefully about online discussion prompts. Although one can never be sure if a new discussion prompt will result in the desired learning outcomes, the guidelines below can help increase the likelihood of success. Many of these guidelines and the table 2 below are drawn from "[Generating and Facilitating Engaging and Effective Online Discussions](#)" (it's worth a read if you have time).

- **Prompts should be open-ended** and allow for multiple correct responses. Good discussion-board prompts also measure higher-order thinking skills. In many ways it's easier to write good discussion prompts that require divergent and evaluative thinking than it is to write good prompts that only require convergent thinking because you don't want the students to arrive at the same conclusion too quickly. See table 2 for examples.
- **Have students discuss in small groups** (four to eight students) rather than whole-class discussions.
- **Set clear expectations** on the length and number of posts that are required.
- **Provide incentives for participation.** Points should typically be given for participation. However, how those points are awarded can vary. At times you will want to use a rubric, which will allow you to assess the quality of comments. However, simply awarding points for participating is sufficient in some cases.

Table 2. Writing Good Discussion Questions ([University of Oregon Teaching Effectiveness Program](#), licensed under Creative Commons BY-NC-SA)

As you prepare questions for a discussion, think about what is most important that students know and understand about the topic (the article you asked them to read, the last lecture on the topic, the chapter in the book, etc.). Shape your questions with that goal in mind. Avoid questions that prompt a yes or no answer. If you get that kind of answer, ask the student to go further and justify their response. Ask them to refer to the reading they were to do for support for their statements, ideas and opinions.

Here are some question types that stimulate different kinds of thinking:

Convergent Thinking	Divergent Thinking	Evaluative Thinking
---------------------	--------------------	---------------------

As you prepare questions for a discussion, think about what is most important that students know and understand about the topic (the article you asked them to read, the last lecture on the topic, the chapter in the book, etc.). Shape your questions with that goal in mind. Avoid questions that prompt a yes or no answer. If you get that kind of answer, ask the student to go further and justify their response. Ask them to refer to the reading they were to do for support for their statements, ideas and opinions.

Here are some question types that stimulate different kinds of thinking:

<p>Usually begin with:</p> <ul style="list-style-type: none"> • Why • How • In what ways... 	<p>Usually begin with:</p> <ul style="list-style-type: none"> • Imagine • Suppose • Predict... • If..., then... • How might... • Can you create... • What are some possible consequences... 	<p>Usually begin with these words or phrases:</p> <ul style="list-style-type: none"> • Defend • Judge • Justify... • What do you think about... • What is your opinion about...
<p>Examples:</p> <ul style="list-style-type: none"> • How does gravity differ from electrostatic attraction? • How was the invasion of Grenada a modern-day example of the Monroe Doctrine in action? • Why was Richard III considered an evil king? 	<p>Examples:</p> <ul style="list-style-type: none"> • Suppose that Caesar never returned to Rome from Gaul. Would the Empire have existed? • What predictions can you make regarding the voting process in Florida? • How might life in the year 2100 differ from today? 	<p>Examples:</p> <ul style="list-style-type: none"> • What do you think are the advantages of solar power over coal-fired electric plants? • Is it fair that Title IX requires colleges to fund sports for women as well as for men? • How do you feel about raising the driving age to 18? Why?

Facilitating the Discussions

Something of a Goldilocks principle is at play in how much the instructor should participate in an online discussion. An instructor who participates too much can actually shut down the discussion by making the activity instructor-centered and not student-centered. However, students also require the instructor's content and pedagogical expertise. Instructor comments can motivate students to increase the quantity and quality of their comments. As a result, if the instructor participates too little, then students may not gain much from the discussion.

Cranney et al. conducted an interesting study examining this phenomenon by correlating student grades on discussion-based activities with the instructor's participation in those discussions.^{Footnote2} Specifically, two figures from their study help tell the story. Figure 1 shows a strong correlation between the amount of time that instructors spent in the online course discussion and students' grades on the discussion. However, as shown in figure 2, only a weak correlation emerged between the number of instructor posts to the discussion and student grades on the discussion activity. This indicates that it's important that instructors spend time monitoring student discussions, but they should focus more on the quality of their posts rather than on posting a lot of comments.

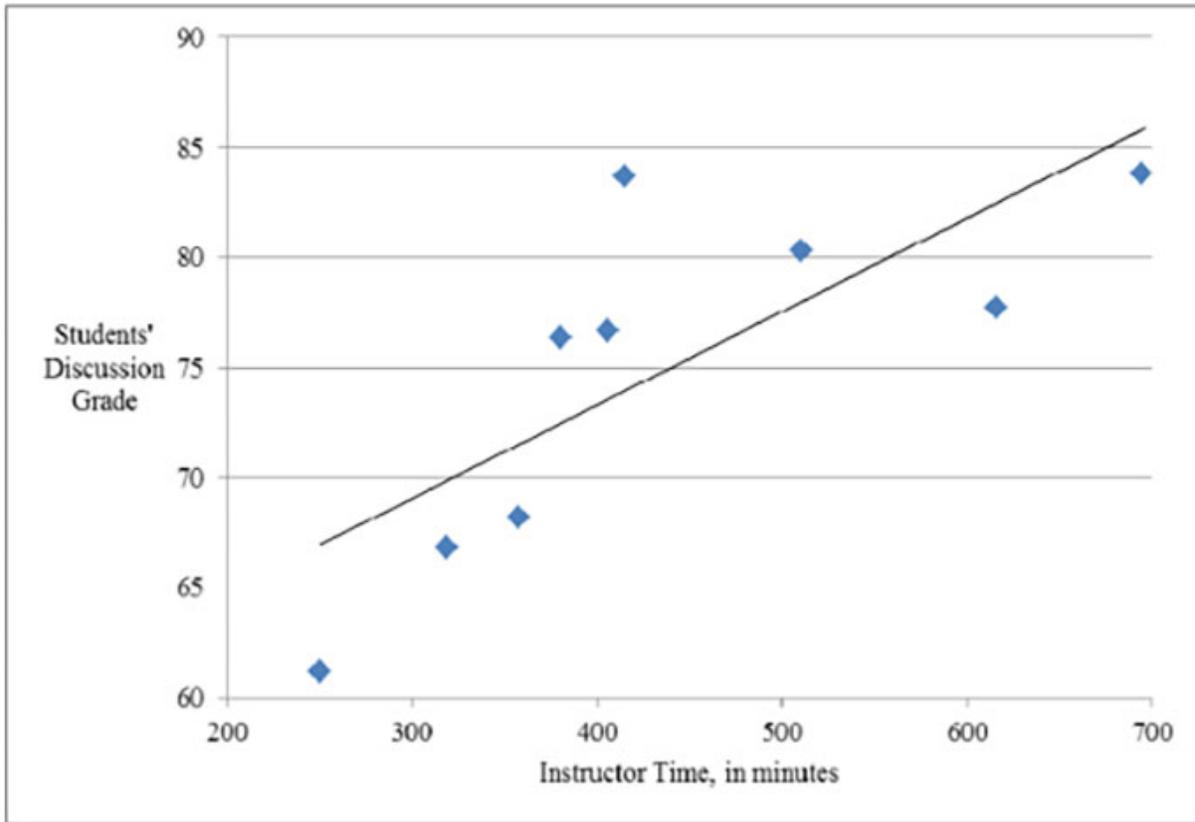


Figure 1. Amount of instructor time spent in online course in relation to students' overall discussion grade

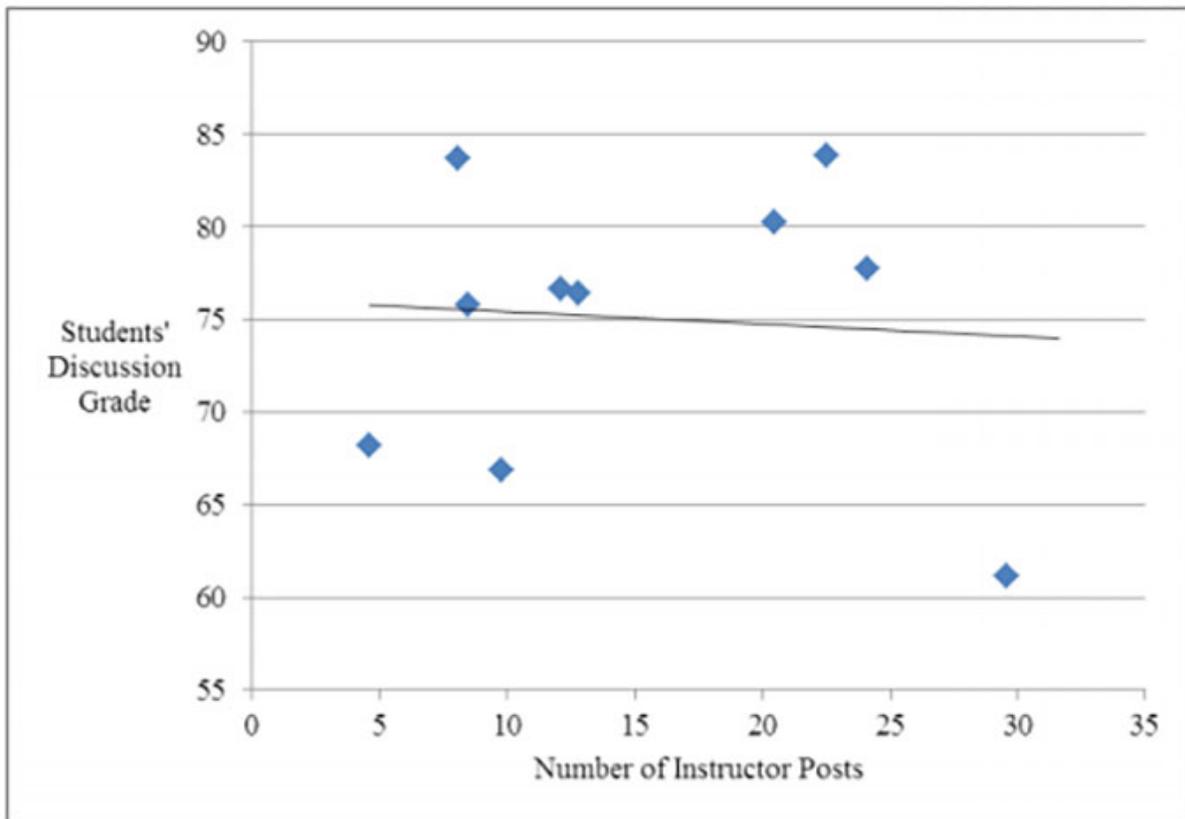


Figure 2. Number of instructor posts in the online discussion forum in relation to students' overall discussion grade

When instructors make comments they are actually fulfilling three important roles: policing, judging, and mentoring. This short video below explains each of these roles.

If you have just a few minutes, Cheryl Hayek has one of the [best and most memorable answers](#) to the question, "How many posts should the instructor make?"



[Watch on YouTube](#)

Managing Your Discussion Board

Conclusion

Discussions are critical in helping students construct understanding. Text-based discussions can help students reflect and think critically but can lack the human touch and emotion that add meaning and interest to what's being discussed. By engaging in discussions using video recordings, students can communicate more personally while still maintaining time to reflect between exchanges. However, asynchronous video discussions still require a quality prompt and instructor facilitation.

Acknowledgment

This chapter was written with the support of EdConnect and previously published at <https://edtechbooks.org/-BEc>

Notes

1. Jered Borup, Richard E. West, and Charles R. Graham, "[Improving Online Social Presence through Asynchronous Video](#)," *The Internet and Higher Education* 15, no. 3 (2012).
2. Michelle Cranney, Lisa Wallace, Jeffrey L. Alexander, and Laura Alfano, "[Instructor's Discussion Forum Effort: Is It Worth It?](#)" *MERLOT Journal of Online Learning and Teaching* 7, no. 3 (September 2011).





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https://edtechbooks.org/asynchronous_video/lets_discuss_discussions.

Improving Problem-Based Learning with Asynchronous Video

Richard E. West

In 2015, Deloitte surveyed nearly 8,000 millennials about the skills needed for work. One of the conclusions of this investigation was that higher education did not prepare these millennials with many of the skills they needed for their actual careers as much as learning on the job did.

Collectively, higher education said, "Ouch."

This does not mean higher education is not important in preparing students for their careers, but it does suggest that we need to reconsider our strategies. Some evidence suggests that problem-, inquiry-, or project-based teaching methods can more effectively prepare students for the kinds of problems and projects they will face in their careers. In short, we can better prepare students to bridge the skills gap.

What is problem-based learning? It can refer to a very specific method developed by Howard Barrows.^{Footnote1} However, I will use the term more broadly to refer to a collection of strategies that focus on providing students with authentic, real-life problems related to their discipline. Students are presented an authentic problem and given support as they work together to solve it. In doing so, they get to practice in school the kinds of decision-making they will do in their careers—but in a safe environment where failure is less consequential. This can help them develop both content knowledge and critical thinking skills.^{Footnote2}

Problem-Based Learning

Here is the challenge, though: how can you support problem-based teaching strategies when you are teaching online? When courses move online, quite frequently they regress toward teacher-centered strategies in which the instructor records a lecture, students read a textbook or online articles, and then the class discusses their thoughts in a discussion board or through video discussions. Although this is not necessarily ineffective teaching, it is incomplete without additional problem-centered activities. But how can instructors support, guide, and develop collaboration and problem-based thinking strategies online?

One possible strategy to help support effective problem-based learning (PBL) is to use asynchronous video—video communication that is recorded when the participants want to record the video instead of all at the same time, as happens in videoconferencing. Similar to videoconferencing, asynchronous video can help develop relationships of trust and connection among the members of a problem-solving team. This sense of connection is critical to collaboration, and particularly key to team creativity,^{Footnote3} because connection is a prerequisite to developing trust within a team, where each team member feels psychologically safe sharing their ideas. This psychological safety is one of four key facets that Neil Anderson and Michael West found contributed to a positive team climate for innovation, along with a shared group vision, a commitment to excellence by each team member, and support for innovation in the organization.^{Footnote4} Because asynchronous video can communicate nonverbal cues, we have found in our research that it can deepen this sense of connection and community.^{Footnote5}

Besides deepening a sense of connection, asynchronous video can support problem-based learning in two other ways: first, by communicating more information about the problem context, and second, by facilitating effective team communication.

Asynchronous Videos as Triggers for Problem-Based Learning

Good problem-based instruction begins with a good trigger, or an authentic problem, described in its context. Often these triggers are written case studies, but providing visual context is important too. Before asynchronous video was common, instructors often provided images as part of problem-based learning triggers. More recently, though, researchers have studied how video can benefit PBL and discovered that video triggers can be more motivating, are preferred by many students, and can help them develop more realistic understandings of the problem.^{Footnote6}

As an example, one team of scholars at the University of Hong Kong studied the PBL sessions of students who received text triggers versus those who received video triggers. They found that those who were prompted by video spent less time simply defining and identifying the problem and more time exploring the solution—and students developed better observational and reasoning skills.^{Footnote7} In other words, they understood the problem quicker and were able to more efficiently move toward solving the problem. As these scholars explained about the use of video as a trigger in medical education, "Video may be a better medium because it preserves the original language, encourages the active extraction of information, avoids depersonalization of patients, and allows direct observation of clinical consultations. In short, it exposes the students to the complexity of actual clinical problems."

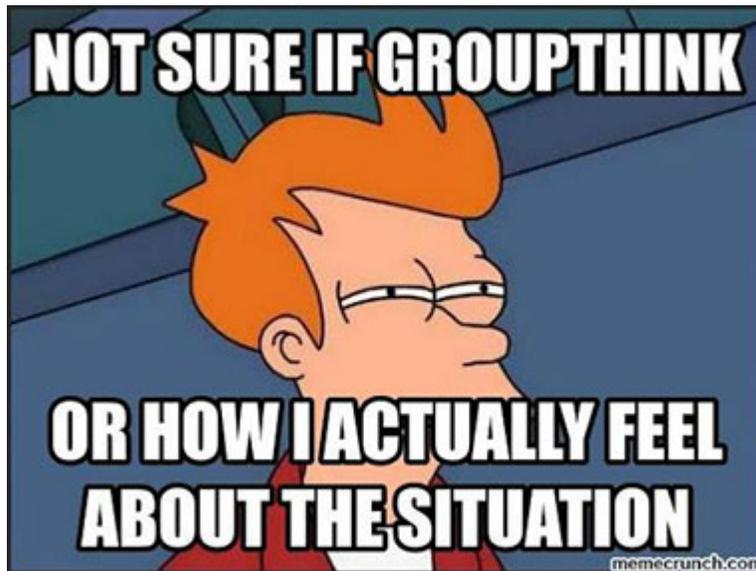
Using Asynchronous Video to Support Team Interactions



Image CC-BY/SA from www.lumaxart.com/

Aside from serving as a trigger to start students on their problem-solving activity, asynchronous video can also be helpful in managing group interactions. A well-known problem with group creativity is the danger of falling into groupthink, in which the group coalesces too quickly around an idea without individual thinking, analysis, and questioning. This can be particularly problematic in synchronous situations, such as in-person discussions or live video

conferences, because after one person in the group offers a suggestion, it becomes difficult, cognitively, for students to *not* think about that suggestion and instead consider new ideas. To combat this problem, team leaders will often ask members of the team to first identify their own ideas and rank them, prior to meeting together where the team can discuss the ideas and reach consensus.



When team members are asked to develop their own ideas independently, the team is less likely to fall into groupthink. Because of the danger of groupthink, using asynchronous video can be an effective strategy for initial group brainstorming discussions by asking team members to first submit video responses showing their ideas for solving the problem before then viewing their peers' videos. In addition, because asynchronous video slows down the conversation, participants may be more thoughtful in their responses, especially if they can delete their response and resubmit a revised idea.

Using video in problem-solving teams has also been shown to help overcome cultural barriers—asynchronous video carries the added benefit of allowing team members who speak other languages to replay or slow down the video to improve comprehension.^{Footnote8} Many tools also allow for qualitative analysis of asynchronous video to sort portions of video into different themes/topics, which can help leaders or team members better evaluate and improve team processes. Also, in some situations, it may be helpful to have students create videos as the outputs of their problem-solving exercise in order not only to better communicate their PBL outputs but also to be able to explain their problem-solving processes and thinking.^{Footnote9}

Finally, an important member of any problem-solving team is the instructor, who can provide advice, mentoring, context, and other forms of assistance. Because problem-solving teams within the same class may be working on different timelines, different problems, or at different paces, asynchronous video can be helpful for allowing these student teams to ask the instructor for assistance when they need it. The nature of video may also allow the instructor to more quickly engage in the brainstorming process with students than through text.

Asynchronous Video: A New Frontier in Problem-Based Learning

As new technologies have emerged in the past few years, asynchronous video is becoming easier to use in more and varied ways. This is a new frontier, and much research is still needed to understand its potential effects. For example, while some research has found that video can deepen critical thinking and comprehension for students, other studies have argued the opposite, perhaps because the video contains distracting elements.^{Footnote10} Also, while students in

some studies said they like the use of asynchronous video, students in other studies prefer text communication or triggers.^{Footnote11}

This variability is not surprising. The research in this area is still very new, and students often have differing preferences for how and when they prefer to engage in education. What is important, though, is for teachers to use a variety of methods for engaging their students and to explore when, where, and why these different methods can support the students they teach. For this reason, asynchronous video is an intriguing addition to the standard approaches already used to support problem-, project-, and inquiry-based learning.

Acknowledgment

This chapter was written with the support of EdConnect and previously published at <https://er.educause.edu/blogs/2021/2/improving-problem-based-learning-with-asynchronous-video>.

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Putting Your Best Self Forward

6 Keys For Filming Quality Videos

Jered Borup

People tend to get nervous when they are new to recording themselves. They seem to believe that to look and sound professional, they need professional equipment. Having worked in studio environments such as the one in figure 1 with [Joan Shin](#), I know that professional-grade equipment can result in more professional videos. However, I also know that the cameras on webcams and smartphones have become quite good, and you can make great looking and sounding videos with the technology you already own, as shown in figure 2. While technology is important, it's much more important to know how to use the technology well.



Figure 1. Joan Shin's video environment



Figure 2. Jered Borup's video products

What Not to Do

Before we talk about best practices, let's cover what not to do. The GIFs in table 1 are exaggerated for effect, but not by much. I think it's safe to say that we have all been guilty of at least some of the following what-not-to-dos.



The Silhouette: People commonly record videos while sitting in front of a window or a lamp. When you do that, others may only see your silhouette.



The Zebra: If natural light is available, it is best to sit facing that light—so long as the window blinds do not cast shadows on your face. Stripes look better on tigers and zebras.



The Haunting: At times we may want to record a video at night. However, be careful because the light from your screen can make it look like you're telling scary stories by the campfire.



The Hostage: Video can be a great opportunity for others to get a glimpse into where you live or work. Too often we don't take advantage of that opportunity and record videos in front of a blank wall. As [Room Rater](#) frequently points out, these recordings can feel like a hostage video, as if at any time the person is going to look if the coast is clear and then whisper, "Help me!"



The Nosey Professor: It's convenient to work with our laptops on...well, our laps. However, looking down at your laptop is a less-than-flattering angle, and you can even give students an unforgettable look up your nostrils.



The Toddler: Just as looking down on the webcam is less than flattering, looking up at the webcam looks like you need a booster seat.



The Close Talker: Some people are just close talkers. [An entire episode of Seinfeld](#) covered the topic. Just like in-person close talkers invade people's personal space, online close talkers can get too close for comfort.



The Social Distancer: If The Close Talker is on one end of the spectrum, The Social Distancer is on the other. Social distancing is important during a pandemic, but is unnecessary online.



The Reader: When we create a video we may feel tempted to watch ourselves or read a script on the screen rather than looking into the camera. This prevents us from creating eye contact and can make us look uninterested or inauthentic.



The Profiler: First-world problems, I know...but if you have two monitors you may find that you spend too much of your video looking at the monitor that is not recording the video. This will leave people staring at your profile. This is more common in live video calls but can still happen when recording videos.



The Needs a Trim: Once we've finished talking, our smiles often vanish as we look for the stop button. Some tools will allow you to trim the ends of the video, but if not, keep smiling until you actually stop the recording. Niccole Thurman perfectly highlighted this in her [tweet](#).

What to Do

I went back to my YouTube channel and found my first webcam video (Aug. 31, 2010) and then compared it to a more recent video (June 20, 2020). It's not by accident that the newer video looks better than the older one (see figure 3). In the first video, I failed to consider (or care) how I was going to appear to my students. I was backlit by the lamp behind me. I was looking down on the laptop. In fact, I didn't even bother holding my laptop level, which made the picture in the background appear tilted. I wasn't even really looking into the webcam, although there was so much glare on my glasses it's hard to tell.

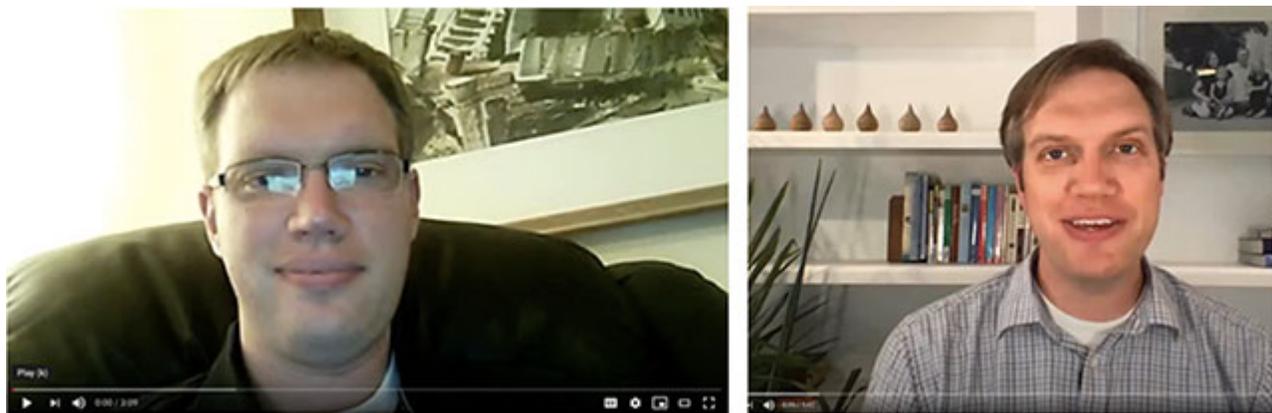


Figure 3. Then and now: How small changes can make big difference in video

In the newer video I took just five minutes to prepare. You can see in figure 4 that I put my laptop on a stack of my daughters' games, which raised the webcam to my eye level. I also used lamps specifically designed for recording webcam videos, though any lamp would work. Even better, you can sit facing a light-filled window. I also made sure that in the background there was a picture of my family, a small plant, and a few other little things.



Figure 4. My home video setup

Keys to Quality Videos

The following simple keys can help you avoid these common pitfalls of amateur video production and create warm, engaging, effective footage that engages your students and communicates your interest them.

Key #1: Convey Your Voice

Looking good is important, but nothing is worse than bad audio. If the audio is distracting or unintelligible, your video will not be watched. If you are recording using your phone while outside, even a little breeze can be really distracting. If the built-in microphone is not great on your phone or computer, try using an external microphone. Most headphones now have pretty good microphones built in.

The audio doesn't need to be perfect, and most of the time, good audio is good enough. However, if you want to go the extra mile, relatively inexpensive high-quality external mics are available, [such as the Blue Snowball](#). Furthermore, if you are hearing reverberations or echoes from where you are recording, you can improve the sound quality by placing pillows behind and to the sides of your computer, as shown in [this NPR video](#).

Key #2: Find the Light

For lighting, the best arrangement is to sit facing the primary light source in your room rather than having the primary light source behind you. Often the best approach is to sit toward a sun-filled window (if the light isn't so bright it blinds you). If that isn't an option, then lamps will do. If a lamp's light is not strong enough, try removing the lamp shade. An additional lamp can also be helpful if you are sitting directly under a strong light that casts shadows on your face.

Key #3: Frame and Maintain Eye Contact

Sit a little less than arm's length from the camera. From there your eyes should be about one-third of the distance from the top of the screen, as seen in figure 5. You should also position the camera so that it is at eye level (or slightly below). That will likely mean placing your laptop on something like a box or a stack of books.



Figure 5. Establishing an optimal vertical relationship of face and camera

Key #4: Stage

Before hitting the record button, take a few minutes to consider the surroundings that will be shown in your video. Personal items can be a good way for others to get to know you. Furthermore, plants, pictures, and bookshelves can add warmth to the video.

While working from home, it can be difficult to find a place to work and record videos. For instance, in [this CNN article](#) you can see people working everywhere from the closet to the bathtub. However, even Jessica Fleming, who was working in her walk-in closet, presented a professional background: "The best part? I've even hung a picture behind the desk so that my video conference calls don't look like I'm in my closet!" As a side note, a closet is a great place to record audio. [Just don't get locked in.](#)

Key #5: Be Prepared and Natural

Speak naturally, as if you were actually speaking to someone rather than a screen. If you are able to show that what you are saying is important and interesting to you, then others are more likely to feel the same way. You should know generally what you want to say before you start recording. However, in most cases it is not necessary or even recommended to write a script that you read. If you are reading from a script, it can be hard to sound natural and almost impossible to read while you are looking into the camera without a teleprompter. If you have ever taken a public speaking class, you know that a better approach is using notes to prompt you while speaking. If you are recording from a laptop or desktop, you can have the notes in a word processing document. However, even that will require you to look down frequently so try placing your notes as close to the top of the screen as possible. Another trick is to put your prompts on sticky notes that you then place right next to the webcam so you can glance over to them while still appearing to be looking into the webcam.

Key #6: Keep It Short

Unlike with in-person courses, online instructors do not have captive audiences. The entire internet is only a browser tab away, and there is very little stopping others from exploring. If you have mastered all five of the previous keys, you are more likely to keep others' attention, but even that attention will likely be limited to about six minutes for many of your students. This recommendation is based on Guo, Kim, and Rubin's research that examined nearly 7 million video views on 862 videos and found a steep drop in engagement after about six minutes.^{Footnote1} Obviously there will be important exceptions to this rule, but if you can keep it under six minutes—do it!

Conclusion

When creating a video, it is important to consider how you will look and sound to your students. Now that you've learned about the six keys to making quality videos, try making a video yourself or review a video that you've previously recorded. As you watch your video ask yourself these questions:

- **Key #1: Convey Your Voice**—Is the audio clear, or is there background noise or reverberations in the room that distract from your message?
- **Key #2: Find the Light**—Are you well lit with a light source in front of you, or are you backlit and/or have shadows on your face?
- **Key #3: Frame and Maintain Eye Contact**—Are you about at arm's length and eye level with the camera, or are you looking down or up at the camera?
- **Key #4: Stage**—Do you have personal and/or interesting things in the background, or are you recording in front of a blank wall?
- **Key #5: Be Prepared and Natural**—Are you speaking naturally in a way that conveys your interest in the topic, or do you sound somewhat robotic and/or scattered?
- **Key #6: Keep it Short**—Is the video under six minutes?

A little preparation can mean the difference between a video that students watch and one that students ignore.

Acknowledgment

This chapter was written with the support of EdConnect and previously published at <https://edtechbooks.org/-RfL>.

Note

1. Philip J. Guo, Juho Kim, and Rob Rubin, "[How Video Production Affects Student Engagement: An Empirical Study of MOOC Videos](#)," Proceedings of the first ACM Conference on Learning @ Scale, March 2014.





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Back to Feedback Basics Using Video Recordings

Jered Borup

Feedback is critical to students' learning. In fact, John Hattie's seminal research found that providing feedback is one of the most powerful things instructors can do to impact student learning.^{Footnote1} Feedback has always been a part of teaching and learning, but the internet has dramatically changed how students demonstrate their learning and how instructors provide them with useful feedback. Although text feedback is still the most common form in our digital world, instructors are increasingly providing their students with video-recorded feedback messages—for good reason.

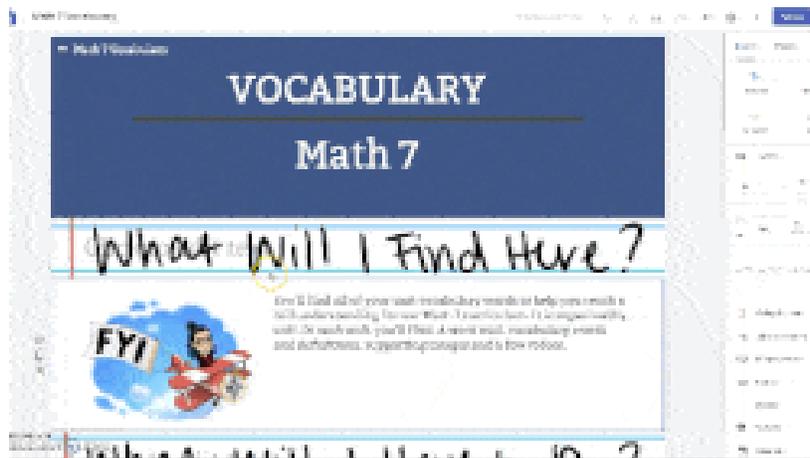
Types of Feedback Videos

You can provide video feedback to students in three ways: (1) webcam video, (2) screen recording, and (3) screen recording with webcam video (see examples below).

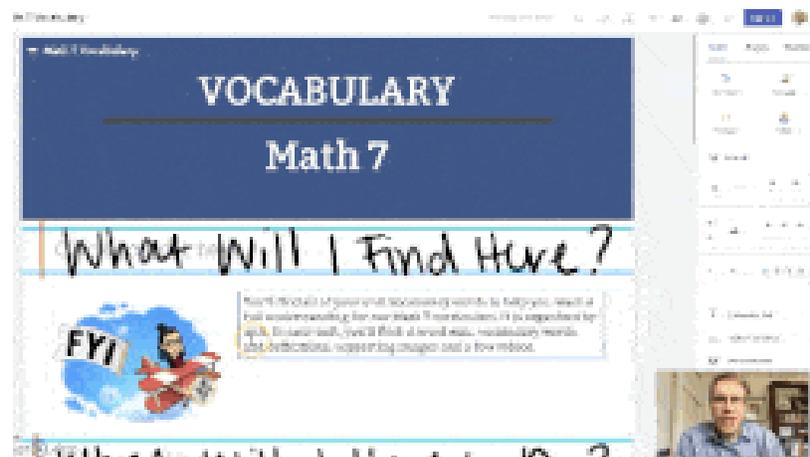
Webcam Only



Screen Recording Only



Screen Recording with Webcam



Each type of video feedback can be used for different purposes.

- **Webcam** videos are appropriate when you are providing feedback that doesn't require you to show student work. By only showing your webcam video, you can help students form a sense of connection with you and know that your goal is to facilitate their learning.
- **Screen recording** videos are appropriate when you need to show and verbally describe specific aspects of students work. For instance, if a student created a project, such as a website, image, or document, showing specific parts of the project as you are giving feedback—as seen in figure 1—can be an effective way to provide feedback. In these videos, students can see their work and hear the instructor's voice but can't actually see the instructor speaking.
- **Screen recording with webcam** videos combine the best of both worlds by placing a small webcam video within the screen recording video. With most tools, however, the webcam video is fairly small, so it can be difficult for students to connect with you, if that is your purpose. Furthermore, if you are not careful, the webcam video can cover up portions of the screen that you are trying to describe. Some tools allow you to change the size and location of the webcam or even remove it completely.

Regardless of the type of video that teachers use to provide feedback, the nature of recording a video allows them to provide more information to students. However, simply providing more feedback is unlikely to benefit students unless it is also quality feedback.

Quality Feedback, and How Video Can Help

Considering the amount of time instructors spend providing feedback, the topic is surprisingly under-researched. I echo Michael Eraut, who said "We need more feedback on feedback."^{Footnote2} When reviewing the research on feedback, my co-authors and I identified three elements of quality feedback.^{Footnote3} Specifically, quality feedback should be **timely**, **friendly**, and **specific** (see figure 2).



Figure 2. Characteristics of effective feedback

Using Video to Provide Feedback That Is Specific and Timely

The primary purpose of feedback is to improve student performance. However, not only should feedback highlight what students need to improve and how to improve it, but it should also affirm to students the specific strengths of their work. It's highly important that feedback comments be grounded in a student's actual performance. If not, it can harm their learning. For instance, if a student did poorly on an assignment but then got a "Great work!" comment, this feedback could reinforce low effort or poor performance, as seen in the following clip from the sitcom "Friends" when Joey was trying to learn French.



[Watch on YouTube](#)

What is Good Feedback?

Providing feedback takes time. As a result, giving students comments that are both timely and specific can be a challenge. Too often teachers either provide quick, generic feedback or provide feedback that is specific but not timely. Having to pick one over the other can be frustrating for teachers. Furthermore, even when instructors take the time to review students' work thoroughly, if they only provide students with scores on a rubric and/or generic-sounding comments, students may question whether the instructors really reviewed their work at all, as in the video below.



[Watch on YouTube](#)

Mr. D

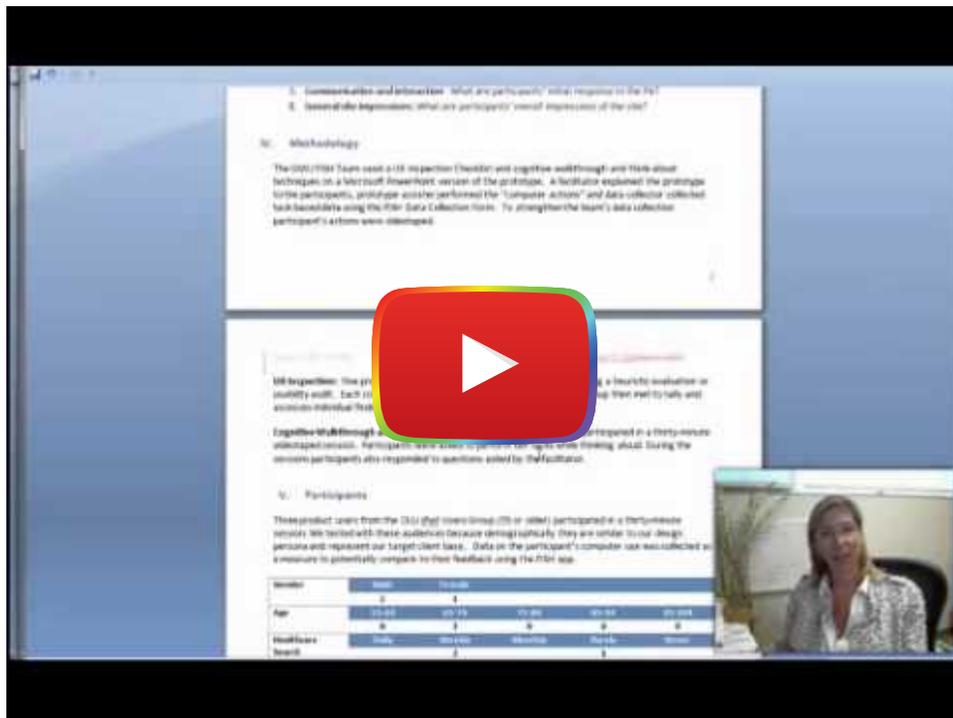
Teachers increasingly provide students with feedback via video in an attempt to give more-detailed comments that are rooted in students' specific work. Video comments can also be quicker than providing text feedback when the feedback needs to be detailed and unique to the student (i.e., when copying and pasting text comments would not work). Greg Grimsby at George Mason University provided the video feedback below, which shows feedback on a student's animation—this is a good example of the value of this kind of feedback. As you watch the video, imagine how difficult it would have been to give that level of detail in text.



[Watch on YouTube](#)

Example of Screencast Feedback

One drawback of providing feedback by video is that students might find it more difficult to refer back to specific parts of the feedback. This is especially important when students are asked to go back to their project and make revisions based on instructor feedback. In other cases, it just makes more sense to provide feedback in text. For instance, if an instructor is reading a student's essay and needs the student to add a comma in a sentence, the student does not need a video explaining that. As a result, in many cases we recommend that instructors provide feedback using some combination of text and video. For instance, if a student has submitted an essay in a word processing document, the teacher can track edits directly within the document but then provide a video feedback comment describing the overall strengths and areas that can be improved. Similarly, as you review students' work, you might jot down notes on what you would like to highlight in your video comment. If these comments are typed on your computer, you can easily send them to the student with a video comment that elaborates on those points.



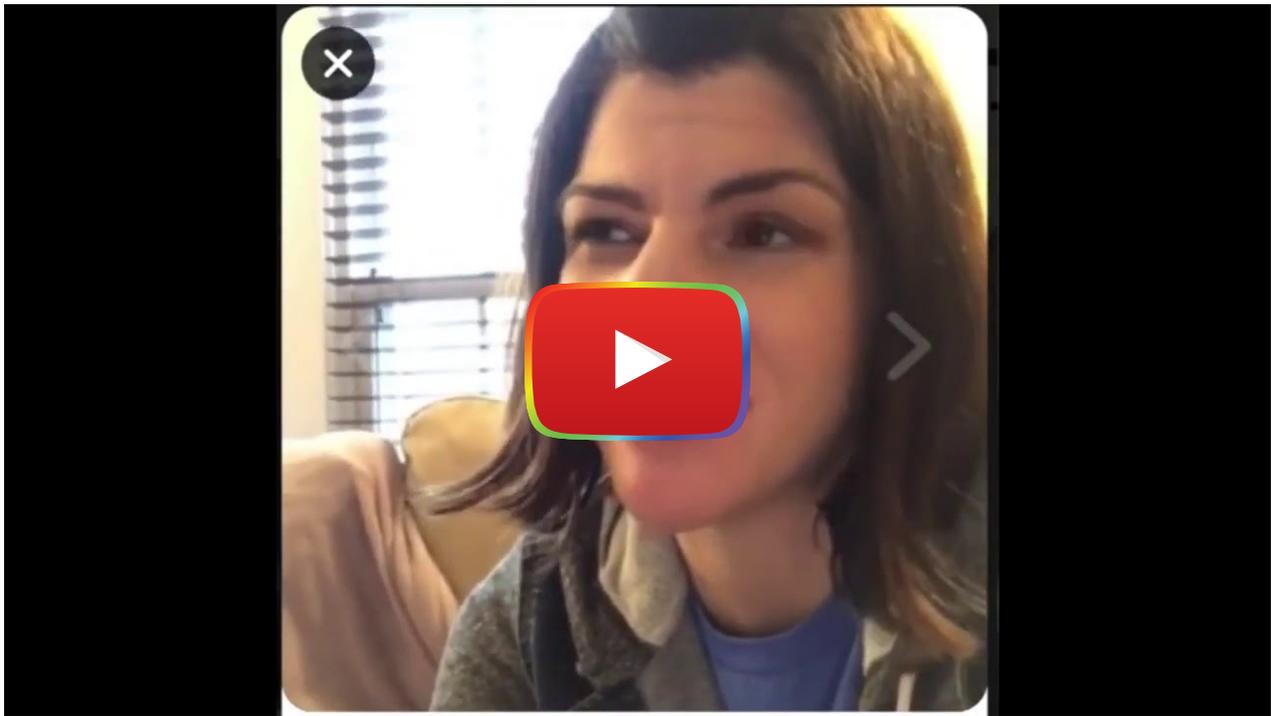
[Watch on YouTube](#)

Example of Screencast Feedback

Providing Friendly Feedback

Even though your feedback will likely correct students' work, it should be delivered in a friendly manner that strengthens rather than harms the instructor–student relationship. One drawback of text is that the recipient can misinterpret the meaning behind the message. In video, the instructor can communicate using facial expressions and body language that remove much of the ambiguity present in text-only messages. That said, if the instructor is trying to hide frustration or displeasure, text is a better choice because in a video, the student will see the frustration all over the instructor's face. Sometimes ending a sentence with an exclamation mark is easier than showing actual excitement.

In an online learning environment, friendly feedback is a great way to build relationships with others. In the following video you can see how Christine McLaughlin, a sixth-grade teacher, used video to correct her math students' pronunciation. The students had been posting videos defining various math vocabulary, and several had mispronounced the term "finite." She was kind in her correction while also showing her students a little bit of her world. It is a simple example but shows how video can be used to provide correction gently and in a way that strengthens the instructor–student relationship.



[Watch on YouTube](#)

FlipGrid Feedback Example

Video alone isn't enough to make our feedback friendly. We also need to structure what we say in a way that balances the praise with the critiques while still being social and friendly. One approach to ensure that your feedback is balanced and friendly is to apply the Feedback Cheeseburger. Notice that we added steam coming off the burger to emphasize that feedback burgers should be served quickly, while they are still fresh.



1. Bun—Relationship Building
2. Cheese—Specific Praise
3. Meat—Needed Corrections
4. Lettuce—General Praise
5. Bun—Support

Figure 2. Feedback Cheeseburger, created by the George Mason University's College of Education and Human Development Online Teaching Initiative (licensed under CC BY SA)

The following video is an example of a feedback comment that followed the model of the Feedback Cheeseburger. Notice that this video features Christine McLaughlin, the same teacher who provided the webcam video comment above. In this case she chose to provide feedback as a screen recording because she needed to highlight specific portions of the students' website.



[Watch on YouTube](#)

Example Screencast Feedback Following the Feedback Cheeseburger

Conclusion

Regardless of the context, quality feedback should be timely, friendly, and specific. At times this can be especially time consuming to provide online using only text, so we encourage instructors to consider how video messages could improve the feedback that they provide to students. The goal is not to use video feedback for all students on all assignments. Rather, instructors strategically use video when it likely to make the feedback more timely, friendly, and/or specific.

Acknowledgment

This chapter was written with the support of EdConnect and previously published at <https://edtechbooks.org/-jNq>.

Notes

1. John Hattie, *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*, (New York: Routledge, 2009).
2. Michael Eraut, "Feedback," *Learning in Health and Social Care* 5, no. 3 (September 2006): 111–118.
3. Jered Borup, Richard E. West, and Rebecca Arlene Thomas, "The Impact of Text versus Video Communication on Instructor Feedback in Blended Courses," *Educational Technology Research and Development* 63, no. 2 (April 2015): 161–184.



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Access it online or download it at

https://edtechbooks.org/asynchronous_video/back_to_feedback_basics.

The Handoff

Transitioning from Synchronous to Asynchronous Teaching

Richard E. West

The United States had been in quite a drought. The American 4×100-meter relay teams have consistently been among the fastest in the world—the men have won the gold medal at the Olympics fifteen times, while second place on the list is shared by the Soviet Union, Great Britain, and Jamaica, all tied at two gold medals. Meanwhile, on the women's side, the United States has won eleven gold medals, with East Germany next on the list with two. In addition, the United States men's team has medaled at all but seven Olympics.^{Footnote1}

But for twelve years, the United States had, astonishingly, been denied victory at the world stage. That changed on October 5, 2019, when the U.S. men's team finally ended the drought and claimed the gold at the world championships in Doha, Qatar.^{Footnote2}

But even then, it almost did not happen. In their qualifying heat, the United States botched two handoffs, the second of which was so poor that the team was very nearly disqualified. Anchor leg Noah Lyles had to push to keep the United States qualified for the final.

"I don't know...the timing was off. I hope we got in," Mike Rodgers told NBC Sports as the team anxiously awaited review to see if their final handoff was completed before the end of the handoff zone.



Play (k)
#NBCSports #ChristianColeman #JustinGatlin

Botched handoff leaves USA 4x100 team's fate in limbo | NBC Sports

[Botched Handoff Leaves USA 4x100 Team's Fate in Limbo](#)

The U.S. men's team was strong. They were prepared. But a poor transition from one part of the race to another nearly destroyed their momentum. Similarly, in teaching, teachers and students generate a momentum that propels the class effectively forward in learning. A change in modalities, however, can disrupt this momentum, causing students to disengage from the course or slowing the rate of learning as information is lost from one part of the course to another. This is particularly a concern in online learning where all of the communication happens via technology.

However, teaching all of the course in a single modality—for example, either completely through text-based discussion, videoconferencing, or asynchronous video—is also problematic. Variety can help students stay engaged, but moving from one part of the course to another carries a risk of poor handoffs. How can instructors effectively combine these different technologies and modalities in their teaching?

Know the Strengths of Each Modality

The first key strategy for teaching with multiple media is to understand the strengths and weaknesses of each. For example, with its increased fidelity or detail provided, video can be better at establishing connection, whereas text can be better for well-argued responses to questions. Synchronous technologies (such as live conversations or videoconferences) can be better for improvisational conversations, brainstorming, and quickly coming to agreement on a topic. Asynchronous technologies, such as discussion boards or asynchronous video, can be better for measured responses and increased flexibility for class members who are not located in the same physical space. Good instruction is more than just understanding the content of a course—it involves understanding how to best communicate that content to others, and the best option can vary depending on the subject, class objective, and the students involved.

Transition the Discussion from One Modality to Another

In my living room, there is a very small gap between the carpet and the laminate flooring. This gap is only one centimeter wide, and yet the exposed pins have caused enormous irritation to us walking barefoot in our home! The lesson? How we transition from one space to another matters a great deal in how well we enjoy those spaces. The same is true online, as care should be provided in how the course transitions from one online space to another. Here are a few suggestions to take advantage of the ebb and flow between online spaces with minimal disruption:

- **Spend the time to design your course well in your learning management system (LMS).** Try to provide all the links to all of the online discussion spaces within one place so students are not scrambling to find where they should go.
- **Have a clear purpose for each discussion or interaction.** Open-ended discussions in which students can "ask me anything they like" or "reflect on anything they find interesting in the reading" are useful sometimes, but often they become unfocused and feel like a waste of time for students. Thus, these discussions are often best offered as optional activities, office hours, or study sessions. More effective for required interactions are specific prompts such as "Jones and Smith mentioned X. How have you seen evidence for X in your own life?" or "How does their explanation of X further explain what we read last week about Y?"
- **Clearly communicate the purpose.** Because you are designing each interaction with a clear purpose, it is often helpful to tell students what that purpose is. If they understand why the asynchronous video or text discussions are important, for example, they may be more likely to stay engaged.
- **Be clear with students about which learning spaces begin a conversation and which ones end it.** For example, in one of my classes, we begin the week with a synchronous videoconference in which I introduce the coming topics for the week and frame the discussion. The class discussion then continues asynchronously through text discussions using online social annotation tools as the students complete the readings. We then end the week with an asynchronous video discussion in which students respond to reflection questions that draw upon all of the week's learnings. Then, the following week, we begin our synchronous video conversation by recapping the discussion from the previous week, answering any questions that were never resolved asynchronously, and highlighting the key points of the discussion. This provides some closure to the discussion from the previous week and helps students know that questions they raise asynchronously will be addressed, either in the text discussions, the asynchronous video discussion, or the videoconference.
- **A chronological view within an LMS is often helpful for students,** enabling them to move step by step through the assignments for the week and know which activities begin or continue which discussions (see figure 1).
- **Alert students to what work should be completed before, during, or after a class discussion.** For example, you might ask students to complete the readings before participating in the asynchronous video discussion; or you could ask them to bring unfinished work to a synchronous session so they can raise concerns with the group. You might ask during a videoconference for students to record asynchronous responses to the day's discussion, or you might ask them in discussion boards to brainstorm ideas that will be discussed later through video. By reflecting on what you want students to do before, during, and after their interactions with you, you are also reflecting on what you see as the purpose for every activity, which will help you prepare better learning activities.
- **Having a consistent rhythm for the class is usually helpful for students.** For example, students appreciate having synchronous sessions at the same time each week and having the same window of time for responses to asynchronous discussions.
- **Establish expectations for interactions between students.** Asynchronous discussions can feel like "shouting into the wind" if people do not return to read or "hear" the comment and respond. Thus, an important approach is to develop class norms about when people will provide the first post and when (and how often) they will return to participate in responses.

Lesson 2: Research, Knowledge, Theory & Paradigms [~2.25 h... Complete All Iter

Lesson 2 Overview [10 min]
May 2 | Mark done

Lesson 2 Reading

Group Annotation - Riddle [30 min]
May 2 | 1 pts | Mark done

Group Annotation - Kimmons A [35 min]
May 2 | 1 pts | Mark done

Read On Your Own - Kimmons B [15 min]
May 2 | Mark done

Asynchronous Discussion 1 [30 min]
May 2 | 0 pts | Mark done

Looking Ahead (Lesson 2) [5 min]
May 2 | Mark done

Figure 1. Sample lesson from a graduate course, indicating the order of discussions

Use Higher-Fidelity Technologies Earlier to Establish Social Presence



Some of the ways we communicate are richer and deeper than other modes of communication in how they engage us. For example, do you yourself more easily distracted in an in-person conversation or in a videoconference? What about in an email correspondence?

The more that all of our senses are engaged in the process of understanding and perceiving others, the more potential there is for our engagement, which also increases the likelihood of feeling a sense of connection, understanding, and trust with each other.

In discussing various ways we can facilitate online or blended learning, Charles Graham referred to these spaces as having four dimensions: space, time, fidelity, and humanness (see figure 2).^{Footnote3} A "traditional" in-person class, for example, is limited in both space and time—the class meets at the same time and at the same place each week. However, it has high fidelity, as we can see, hear, touch, and even smell each other. This makes us seem more "human" to each other, and we feel a greater ability to relate to each other as people rather than as names or avatars.

Dimensions of Interaction

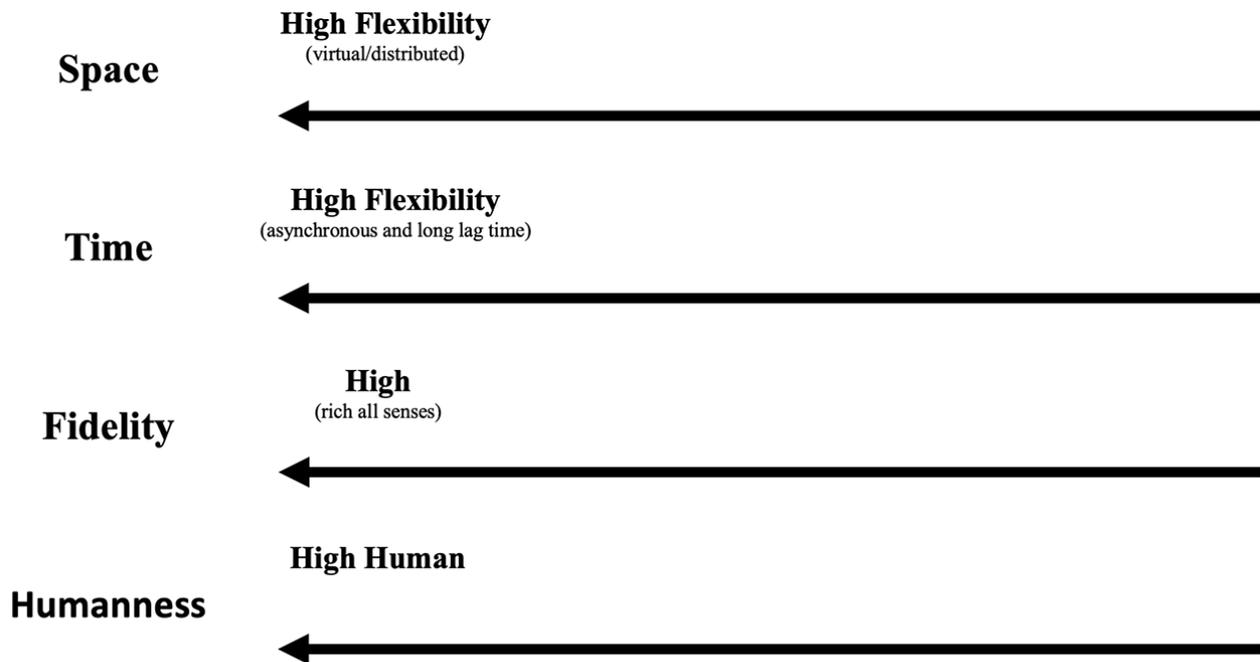


Figure 2. Graham's dimensions of online learning spaces

In general, in-person teaching has more fidelity than online teaching and video has more fidelity than text. This is, of course, a general statement with plenty of exceptions—for example, an immersive experience watching a movie in a theater can have higher fidelity than watching an elementary school play from the back of a gym where you cannot hear or see very well. The point is that some learning experiences have higher fidelity than others, and higher fidelity is usually helpful in establishing relationships and norms. For this reason, often the best strategy is to schedule these higher-fidelity experiences at the beginning of the course. For example, many online programs require students to attend an in-person retreat at the beginning of their studies. Similarly, many effective teachers begin their courses with in-person class sessions before moving online—or at least begin with synchronous video sessions before moving to asynchronous discussions. Holding higher-fidelity sessions at the end of the course can also help bring closure to the human experience the students and instructor had together in the course.

Use More Efficient Technologies Later to Complete Projects



Depending on the task, higher-fidelity media tend to be comparatively inefficient. How many meetings have you sat through and thought "This could have been an (asynchronous) email"? Perhaps the takeaway is this: When the goal of the activity is to efficiently complete straightforward tasks or communicate information that is easily understood, select a medium that emphasizes flexibility and focuses the communication to a point. When the goal is to develop relationships, increase connection and engagement, or brainstorm and problem solve, select a medium with greater fidelity.

Be Aware of and Sensitive to Students' Needs

This article ends with a big "but," which is, above all, we need to understand and know our students' needs. Less flexible learning environments may have higher fidelity, but pay attention to whether the lack of flexibility excludes some learners from participating. If it does, we may be perpetuating and extending systemic prejudices that prevent some groups of students from succeeding to the same degree as others. For example, even though in-person meetings can build relationships, they can exclude the mother with young children at home, the working professional unable to leave work, or the international student working in the middle of the night to participate. Synchronous videoconferences can provide the back and forth of conversation unless some participants have poor internet access or no access at all.

In addition, even in perfectly equitable learning conditions, there is great variety in how students engage with various media. Introverted students often prefer asynchronous settings in which they can compose their thoughts before posting. However, extroverts may find this tedious and prefer synchronous settings where they can "think out loud." International students often can read a non-native language better than hear it and, as a result, can better participate in text-based discussions. Sometimes, the difference comes down to just a simple learning preference. For example, I like to listen to conversations while standing or doing something routine like housework because it helps me focus.

Know Your Students, Know Your Technology

All of this means that the best answer needs to be personalized to your teaching situation. Within that truth lie a few key conclusions:

1. Instructors should seek to understand the strengths and weaknesses of various communication technologies and thoughtfully consider which to be most effective for each learning activity.
2. Instructors should pay attention to the transitions from one modality to another so that students understand where they are supposed to go for a discussion and why.
3. Variety can be helpful, as it can enable students with different learning preferences to participate in the ways they find most comfortable.
4. Be aware of students' needs and provide alternative ways for students to participate in a conversation if needed.

Oftentimes compromises must be made between flexibility, equity, and fidelity. Recently, asynchronous video has emerged as one technology that may hold great promise as an educational method that can be both flexible and higher in fidelity than text-based discussions. It may not be the right answer for every teaching scenario, but it could be another arrow in the quiver for instructors.

Acknowledgment

This chapter was written with the support of EdConnect and was previously published at <https://edtechbooks.org/-dLnN>.

Notes

1. See [4×100 metres relay at the Olympics](#), Wikipedia.
2. "[U.S. Men End 4×100m Relay Drought with First Title in 12 Years](#)," NBC Sports, October 5, 2019.
3. Charles R. Graham, "[Blended Learning Systems: Definition, Current Trends, and Future Directions](#)," in *The Handbook of Blended Learning: Global Perspectives, Local Designs*, eds. Curtis J. Bonk and Charles R. Graham (San Francisco: Pfeiffer Publishing, 2006), 3–21.



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