Chapter 6. Finding the Sweet Spot: Strategic Course Design Using Videos

Christine I. McClure

Embry-Riddle Aeronautical University, Daytona Beach

Cat Mahaffey

University of North Carolina at Charlotte

Abstract: Teaching online often means that we don't "see" our students, which makes it difficult to build the kind of strong student-teacher connections necessary for student success. We propose that videos and video conferencing allow us to re-embody ourselves and make online instruction personal and more effective. This chapter is framed around each element of PARS, using videos to enhance personal connections--between the instructor and students, as well as among students; to create accessible course content; to be responsive, including student feedback and timely course announcements; and for strategic video creation and placement within an online course. We focus on both the whys and hows of creating different types of course videos, grounding our discussion around intentional pedagogical choices that instructors can make regarding when, how, and where to do such labor. This chapter includes appendices with walkthroughs for creating videos using free open-access software—OBS, Screencast-O-Matic, Zoom and Screencastify—as well as using the auto captioning tool in YouTube to edit captions and/or create transcripts.

Keywords: personal, accessible, responsive, strategic, video making, screencasting, captions, transcripts

Designing an online course is never simple. Most instructors feel confident in their knowledge of discipline-specific content and are eager to share that knowledge with students, but they often don't know how to help students understand course content, much less keep them engaged with that content in an online environment because of lack of training in eLearning theories. When we teach face-to-face, we use visual cues to determine when/if students understand our lectures. We design interactive experiences such as incorporating clicker technology or engaging students in discussions, but how does that translate to an online experience? How do we ensure that students are engaged in "active learning," or "methods that allow students to construct their own understanding of course material and engage in the learning process" (Caviglia-Harris, 2016, p. 322)? How can we disseminate our discipline specific content knowledge in ways that allow students to actively interact with the information, "pay attention, . . . organize in-

coming information, . . . [and] integrate incoming information with other knowledge" (Peters, 2014, p. 23)?

Although there are multiple ways to foster active learning, some proven methods are video conferencing and instructional videos (Borup et al., 2015; Clark et al., 2015; Fiorella et al., 2018; Lamey, 2015; Peters, 2014; Thomas et al., 2017). Online instructors are likely already aware that videos facilitate enhanced presence, class community, and accessibility, but many either aren't comfortable with recording tools or aren't confident in knowing where and when to use videos. In their book, *Personal, Accessible, Responsive, Strategic: Resources and Strategies for Online Writing Instructors*, Borgman and McArdle (2019) discuss extensively how videos aid in creating more personal and accessible online writing classes. Although there are many videos already designed for online learning, such as Khan Academy, we believe that instructors should make their own videos to at least supplement outside content.

We fully recognize the increased workload, often without additional pay, support, or resources, necessary to create new content for online delivery, especially those who must first learn the basics, so for some, our call for video presence and enhanced course materials will sound daunting. To that end, this chapter focuses on both the whys and hows of creating videos. Specifically, we aim to lay out intentional pedagogical choices that instructors can make regarding when, how, and where to do such labor, and we hope to demonstrate that the benefits of creating videos for your online courses far outweigh the difficulties you will encounter. This chapter is framed around each element of PARS, as we first explore how videos enhance personal connections—between the instructor and students, as well as among students. Then we lay out the importance of accessible course content with an expanded definition of what accessibility means. The next section shares our experience of using videos as a tool for being responsive, including student feedback and course announcements. The final section puts everything together by offering best practices and how-tos for strategic video creation and placement within an online course.

Increasing Personal Connections

Teaching online generally means never seeing our students, and it also means that they never see us. This "seeing" is more than a lack of visual cues; it is also a lack of hearing, a disembodiment that affects the possibility of building a relationship with our students. This lack of relationship, or connection, is often one of the biggest difficulties in online environments (Borgman & McArdle, 2019). Since there is no "body/face/voice [the] corresponding visual/oral/aural components are gone" (Hewett, 2015, p. 60), and we are reduced to alphabetic text through the design of our courses, assignment guidelines, announcements, and feedback or static pictures that attempt to convey who we are. Most online teachers now include pictures of themselves on their bio pages, as shown in chapter one of

Borgman and McArdle's (2019) book, and they also state that being disconnected physically can create a sense of insecurity in our students. In order to build personal relationships with our students and offset their insecurity, we need to re-embody ourselves. Through our face, voice, eyes via videos, we make online instruction not only more personal, but more real and tangible in a way that can't be achieved solely through alphabetic text, static pictures, or even videos created by other people/instructors.

Research suggests many benefits to instructors creating their own videos for online instruction. First, students report a sense of connection in courses where instructors regularly interact either via synchronous video conferencing or asynchronous video (Clark et al., 2015). This instructor-to-student connection is vital for student success. In fact, Borup et al. (2011) found that student interaction with their instructor was similar to that of face-to-face instruction, and the majority of students stated that video communication helped them to develop an emotional connection with their instructor and to know that they could rely on them for help. This emotional connection illustrates a deeper level of trust between instructors and students, leading students to reach out more often because they are confident that there is an actual person they can depend on beyond the interface. Some students also said that the videos contained a type of visual self-disclosure that helped them get to know their instructor (Borup et al., 2011). Students want to see who we are; they want to know that we are human. We need to stop worrying about the "mess" behind us as we record ourselves or whether we are perfect or not. Second, asynchronous videos are better for conveying complex concepts and fostering reflective engagement with ideas at a higher level (Borup et al., 2015), especially when instructors make eye contact with the camera (Fiorella et al., 2018), rather than relying solely on alphabetic text that can be misinterpreted or misunderstood. We are used to speaking to our students and clarifying ideas orally, so we should put those skills to use by creating our own content videos. We should explain to our students what we mean while looking them in the "eye."

In addition to making a connection with students and clarifying complex concepts, making our own videos lets students see our emotion—as long as we are willing to share that side of ourselves. Snart (2010) believes instructors should

> look at the computer, look at the webcam, look back at the computer, then finally say what you, um, have to, um, say . . . this all may produce a very real and approachable online identity (if a somewhat comical one), which is ultimately what we are going for. (p. 116)

In short, we should strive for authenticity and honesty in our videos because, ultimately, we want to make personal videos for our students. However, not all instructors are as emotive as others. In fact, in their study of text and video feedback, Thomas et al. (2017) determined that text feedback exhibited a higher frequency of emotion in instructor feedback than in the videos that they reviewed,

but they acknowledged it was easier to code for textual emotion which was exhibited through elements such as exclamation points and all caps. Their research indicates that not all professors use their facial expressions or vocal inflection to illustrate the same level of emotion, but those professors who are more emotionless in video may show more emotion via textual feedback. Ultimately, we need to remember that although most research shows videos are important in projecting an embodied presence in our classes and in helping us to connect with our students, not all instructors have the same emotive facial or vocal tonal variations, and this is okay. We are all different, and we have different teaching styles, and this will be evident in our videos just as it is in our face-to-face teaching. Students want to see our humanness, our eyes, our face, because they want to connect with us as people. We also believe that text in the form or captions and transcripts should be included, so add those capital letters or exclamation points, if that is your style.

Increasing Accessible Course Content

In addition to embodiment issues, there are multiple accessibility concerns in online course delivery. Many instructors focus on accessibility in terms of disabilities that need to be overcome rather than removing barriers in the environment that are causing issues (Tobin & Behling, 2018). One student may have an accommodation due to being hearing impaired, but how many other students have issues not brought to the attention of Disability Services and/or issues that affect learning, such as limited access to technology or outside jobs and family? Furthermore, some students may not even be aware they have limitations, especially those that require extensive and expensive testing protocols for official documentation (i.e. hearing impairment, depression, anxiety, etc.—see Kerschbaum et al., 2017). The OWI [Online Writing Instruction] Committee for Effective Practices in Online Writing Instruction (2013) defines accessibility as the "needs of learners with physical disabilities, learning disabilities, multilingual backgrounds, and learning challenges related to socioeconomic issues (i.e., often called the digital divide where access is the primary issue)," and they argue in their position statement (cccc.ncte.org/cccc/resources/positions/owiprinciples) that the OWI environment must address issues of equity, flexibility, use, error, and technological effects so that students in writing courses can be successful. We need to realize, however, that not all students provide documentation to university disability services offices, nor do they share any outside obstacles that may affect their success in our classes. Borgman and McArdle (2019) stress that accessibility is more than just compliance. They encourage an expansion of how we define access to one that considers "the ways that [we, as teachers] might actually be impeding [our] students learning by creating barriers to the access of [our] course content (2019, p. 37). We must rethink how we approach accessibility, and focus instead on how to make our classes accessible to all learners, and we must consider course/con-

tent access in much broader terms. According to Tobin and Behling (2018), the U.S. Department of Justice's Office of Civil Rights is reframing requirements of higher education due to lawsuits brought by individuals against colleges and universities. They argue that we should no longer wait for accommodation requests from students; instead, we should provide equal access to all educational material in a timely manner, which will benefit all students and will avoid discrimination. It is our job as instructors to teach all of our students, and we must accommodate the physical, technological, emotional, and mental issues that may potentially prevent our students from succeeding and remove as many barriers as possible by providing our educational materials in multiple forms: visual, auditory, and text based.

We view our call for usage of videos in online courses as a way to fulfill the expanded definition of accessibility laid out by Mahaffey and Walden (2019):

> Accessibility refers to the ease of entry and use of a product, service, space, or text; and considers course design (navigation, layout, color scheme, font type, font emphasis), course tools (applications, discussion forums, quizzes) and course materials (instructional texts, resources, assignment descriptions, submission and evaluation guidelines). Thus, an accessible tech-mediated course is one that affords every learner the opportunity to succeed, regardless of technological skill, reading level, native language, learning preference, or physical impairment. (p. 42)

The different types of videos you can create (announcements, feedback on assignments, assignment walk-throughs, content, syllabus overviews, etc.) open up visual and auditory access to your materials that are not possible in just textual form. They allow students who are visually impaired, or those who are visual learners, the ability to understand content, connect with you, and engage in active learning. This also increases access for working students who may need to listen to a lesson while driving. It's important to note here that we are not proposing using videos exclusively since that would actually limit access. The larger goal is to encourage you to incorporate videos into your course development processes.

Furthermore, we advocate for all videos to be captioned and accompanied by transcripts. As Kerschbaum (2013) notes, "it is almost impossible to read a transcript and watch a video at the same time" (p. 62), and providing access involves more than creating a separate accessible component that exists outside of the original text. Doing so would be an example of retrofitting which is reactive rather than proactive. For example, transcripts *proactively* accommodate students who prefer reading a text to watching a video, and students with limited broadband access who are perhaps using data plans to access their courses when internet access is unavailable. Our goal is to provide students with multiple options to access content without specifically requesting it.

Increasing Responsiveness

One way to incorporate videos into your course is by responding to student work via video rather than just through text. Lamey (2015) says, "commenting on students' work in the form of a video has the potential to improve the feedback experience for both instructors and students" (p. 692), but he questions whether this is the best option for writing classes since instructors tend to include more global rather than sentence-level comments through video feedback. This is a valid concern, but this issue can be solved by being thoughtful in our approach to feedback and resisting the urge to focus on only general writing issues. Intentionally referencing specific sentences or paragraphs demonstrates a deeper commitment to student improvement. Hewett (2015) argues that video actually allows instructors the ability to "drill down into content or sentence-focused specifics because the instructor can point students to particular pages or lines in a text" (p. 191). We need to remember that it is our job to help students improve, and giving clear, specific feedback is one way to do that. While video feedback increases interactivity, video length is of concern. Lamey (2015) suggests that feedback be given in no more than four minutes, but we recommend between five to seven minutes to avoid overwhelming students while allowing ample space for specific rather than general feedback.

Instructors must also consider their own time constraints, and often writing specific feedback to each student can be time consuming, which limits the amount of individual feedback to students. As Borgman and McArdle (2019) explain, "[h]aving enough energy to provide effective feedback comes down to managing your time and resources" (p. 55). The good news is that video feedback decreases the time instructors must dedicate to grading while also increasing the amount of feedback provided (Warnock, 2009). Having said that, it's important to keep in mind that some students prefer written feedback. Borup et al. (2015) determined that written feedback was easier to access since students could easily scan the text rather than having to watch an entire video, and they could read the text anywhere, but watching a video was problematic due to sound issues or internet capabilities. They also found that instructors were more concise in their text comments than in video. Despite this, video feedback allowed students to gauge instructor "visual and vocal cues . . . [which] seemed to help in conveying the praise the instructors intended," and it also seemed to "soften criticism" (2015, p. 177). Furthermore, instructors were more conversational in their videos than in their text feedback. We believe that the findings of this study support our call for consistently providing captions and transcripts with all videos, especially instructional and feedback videos that students may need to access in multiple ways. If this can't be done in the LMS, we recommend that you bullet point your feedback in a clear and concise way in textual form so that students can easily refer back to your feedback as they revise or rewrite.

Increasing Strategic Application

We recognize that creating online courses increases workload, often without additional pay, support, or resources, so for some, our call for video presence and enhanced course materials will sound daunting. In this section, we discuss the fourth element of PARS, strategic, and offer a strategic framework for thinking about how, where, and when to invest in video creation. We think it's important to utilize open access software to minimize financial burdens on faculty, so the tools we profile are free to use with some limitations, but most of them offer paid subscriptions with enhanced features. This section will focus only on the capabilities of free tools to help you decide which tool could be utilized for your video and how to use those tools. We have included four appendices at the end of this chapter with directions on how to use each tool: OBS, Screencastify, Screencast-o-matic, Zoom. In addition, we include a final appendix with direction on how to upload any MP4 file to YouTube, and how to create and edit captions, and transcripts.

Table 6.1. Comparison of recording platforms and tools

Capabilities	Screencastify	Screencast-O-Matic	OBS	Zoom
Pause and restart	Yes	Yes	Yes	Yes
Record screen	Yes	Yes	Yes	Yes
Record webcam	Yes	Yes	Yes	Yes
Record screen and webcam simultaneously	Yes	Yes	Yes	No
Annotation and Drawing	Yes	No	Yes	Yes—on whiteboard
Shift between screen and webcam	No	No	Yes	Yes
Edit video	Trim only Need paid subscription for advanced editing	Need paid subscription	Yes	No
Save MP4 file locally	Yes	Yes	Yes	Yes
Create captions	No	No	No	Yes
Edit/add captions	No	Yes	No	No
Time Limit	5 minutes Unlimited with paid subscription	15 mins	None	40 minutes
Cost for more video affordances	$29/yr for educators	$19.80/yr	N/A	N/A

To emphasize our goal to situate different types of videos, along with clarifications for where, how and when to create and include them in an online course, we describe our framework through the following golf analogies: the Tee Box, the Fairway, and the Green. Like each of these areas of the golf course, tools and strategies for making videos are context specific and having shifting best practices.

The Tee Box

The tee box is typically the starting point for golfers. It's where you view the layout of the hole, the length of the fairway, and any sandpits or trouble spots. This analogy is helpful for considering how much time and energy to invest in course instructional videos. Specifically, this starting point offers instructors the opportunity to make decisions about where instructional videos might be reused across courses and/or semesters. For example, if you teach the same course often, you might want to create videos that walk students through course concepts or assignments that you're least likely to make major changes to every semester. And these longer lasting videos are wise places to invest more time and energy, especially if you expect students to learn and/or practice concepts in asynchronous learning environments.

Best Practices for Tee Box Videos

- Create or work from a transcript and include this with the video or link to the video
- Write the presentation content: PowerPoint, Google Slides, or Prezi
- Include edited captions
- Be yourself so students can sense your presence
- Speak clearly, but don't be afraid to make mistakes
- Chunk your content and make more videos rather than trying to create one long video- no more than seven minutes per video, but shorter is better

The Fairway

A successful drive from the tee box lands the ball in the fairway, the place of strategic transition between the long drive and the final putt. This analogy is helpful for thinking about what type of videos to create and/or adapt based on changes made for each iteration of a course, things like welcome, start here, and course navigation videos. The fidelity of these videos is less critical so you can feel comfortable simply recording your webcam for welcome videos and recording your course website for start here and course navigation videos.

Best Practices for Fairway videos

- Create or work from a transcript and include this with the video or link to the video

- Include edited captions
- Be yourself so students can sense your presence
- Shorter is better—no longer than five minutes

Table 6.2. Best practices for tee box videos

Tee Box Videos	Assignment Walk-throughs	Course Content
Recommended Technologies	OBS Screencast-O-Matic Screencastify Zoom	OBS Screencast-O-Matic Screencastify Zoom
Maximum Length	5 minutes	5-7 minutes
Visuals	Completed Assignment Guidelines	Completed Course Design
Transcript / Captions	Essential	Essential
Screen Capture	Essential	Essential
Webcam	Helpful	Helpful
Headset w/ Microphone	Essential	Essential

Table 6.3. Best practices for fairway videos

Fairway Videos	Welcome	Course Navigation	Instructor Introduction	Start Here/ Syllabus Walk-through
Recommended Technologies	OBS Zoom	Screencast-O-Matic Screencastify	OBS Zoom	Screencast-O-Matic Screencastify Zoom
Maximum Length	5 minutes	5 minutes	3–4 minutes	3–4 minutes
Visuals	Webcam	Completed Course Design	Unnecessary	Completed Full Syllabus
Transcript/ Captions	Essential	Essential	Essential	Essential
Screen Capture	Unnecessary	Essential	Unnecessary	Essential
Webcam	Essential	Helpful	Essential	Helpful
Headset w/ Microphone	Recommended	Recommended	Helpful	Essential

On The Green

A good shot from the fairway lands the ball on the green, where the golfer pulls out the putter and the final putt(s) take place. The only place the putter is used, this unique space calls for a completely different strategy, one that involves reflection and keen aiming. This analogy aligns well with those course videos that you create on-the-fly, things like weekly announcements and reminders, whole-class or individual feedback, and syllabus or calendar updates. Even though these are created at the last minute, these videos are perhaps the most impactful and most important with regard to instructor presence. For this reason, instructors should attempt to get comfortable with seeing and hearing themselves on screen. The more real and less polished you are, the stronger your presence will be perceived by students.

Best Practices for On The Green Videos

- Avoid overplanning
- Be yourself so students can sense your presence
- For feedback, refer to specific sections of the student paper—give some general feedback, but give specific feedback as well

Table 6.4. Best practices for on the green videos

On the Green Videos	Weekly Announcements	Syllabus / Calendar Update	Individual Student Feedback	Whole-Class Feedback
Recommended Technologies	OBS Screencast-O-Matic Screencastify Zoom	OBS Screencast-O-Matic Screencastify Zoom	OBS Screencast-O-Matic Screencastify Zoom	OBS Screencast-O-Matic Screencastify Zoom
Maximum Length	5 minutes	2–3 minutes	5–7 minutes	5 minutes
Visuals	Weekly Overview of Coursework	Updated syllabus/ calendar	Student Submission	Student Samples or Models
Transcript/ Captions	Essential	Essential	Essential	Essential
Screen Capture	Recommended	Helpful	Essential	Recommended
Webcam	Recommended	Helpful	Recommended	Recommended
Headset w/ Microphone	Recommended	Recommended	Recommended	Recommended

Final Thoughts and Application

In order to be effective online instructors, we need to think about how we can engage with our students beyond the text, and using the PARS framework allows us to view videos in a more dynamic, inclusive way. First, through the creation of our own lecture, announcement, and feedback videos, we re-embody ourselves by including our image and voice so our students see us as human beings who want to make personal connections with them and help them succeed. Second, we should consider an expanded definition of accessibility to include not only students who have physical disabilities or accommodations through university disability services, but also those who have technological, familial, language, or other issues that could in some way impact their educational endeavors. We need to make our videos proactively accessible to the widest range of students through our choices of technology, captions, graphics, transcripts, and design. Third, creating feedback videos allows us to be responsive to students while still balancing our own (often very heavy) workloads. Fourth, we need to be strategic in our choice of technology. Remember, students do not need highly edited, complex videos with graphic overlays to help them understand course concepts. To help you in your video creation, we have included five appendices which describe how to use various technologies at the end of this chapter. As instructors, our goals are not to show off our video skills; instead, we should strive to utilize technology thoughtfully with pedagogical reasoning.

Like students, online instructors come to the "classroom" with diverse experiences, values, and talents. We fully recognize that there is no one-size-fits-all model for teaching—not for face-to-face classrooms nor online environments—and we certainly aren't advocating that videos can or should replace the real-time dynamic interactions that foster deep and transferable learning. Instead, we hope that this chapter grants online instructors knowledge of free programs and how to use them, a sense of empowerment, and an expanded vocabulary for types of instructional videos and an awareness of how and where to create and use videos in their online courses.

What we all care about is education, and we want every student to succeed. To that end, we also hope this chapter makes the case for no longer "privileging a particular set of preferences and modes of working" (Kerschbaum, 2013). Accessibility is an ever-increasing challenge, one that can be "particularly hairy (but especially important)" (Peters, 2014, p. 185). In their latest reimagining of a "set of principles and tenets for online literacy education," the Global Society of Online Literacy Educators (GSOLE) placed accessibility at the top of their list, including the following definition of access and inclusion: "Inclusion and access involve using multiple teaching and learning formats, engaging students' choices, and welcoming all students in the course" (gsole.org). We assert that strategic use of video conferencing and instructional videos are perhaps the best way to welcome and engage students into an online learning environment, while increasing instructor presence and fostering instructor responsiveness.

References

Borgman, J., & McArdle, C. (2019). *Personal, accessible, responsive, strategic: Resources and strategies for online writing instructors*. The WAC Clearinghouse; University Press of Colorado. https://doi.org/10.37514/PRA-B.2019.0322

Borup, J., West, R. E., & Graham, C. R. (2011). Improving online social presence through asynchronous video. *Internet and Higher Education*, *15*(3), 195-203. https://doi.org/10.1016/j.iheduc.2011.11.001

Borup, J., West, R. E., & Thomas, R. (2015). The impact of text versus video communication on instructor feedback in blended courses. *Educational Technology Research and Development*, *63*(2), 161-184. https://doi.org/10.1007/s11423-015-9367-8

Caviglia-Harris, J. (2016). Flipping the undergraduate economics classroom: Using online videos to enhance teaching and learning. *Southern Economic Journal*, *83*(1), 321-331. https://doi.org/10.1002/soej.12128

Conference on College Composition and Communication OWI Committee for Effective Practices in Online Writing Instruction. (2013). *A position statement of principles and effective practices for online writing instruction (OWI)*. https://www.ncte.org/cccc/resources/positions/owiprinciples

Clark, C., Strudler, N., & Grove, K. (2015). Comparing asynchronous and synchronous video vs. text-based discussions in an online teacher education course. *Journal of Asynchronous Learning Network*, *19*(3), 48-70. https://doi.org/10.24059/olj.v19i3.668

Fiorella, L., Stull, A. T., Kuhlmann, S., & Mayer, R. E. (2018). Instructor presence in video lectures: The role of dynamic drawings, eye contact, and instructor visibility. *Journal of Educational Psychology*, *111*(7), 1162-1171. https://doi.org/10.1037/edu0000325

Hewett, B. L. (2015). *Reading to learn and writing to teach: Literacy strategies for online writing instruction.* Bedford/St. Martin's.

Kerschbaum, S. (2013). Modality. *Kairos: A Journal of Rhetoric, Technology, and Pedagogy. Kairos: A Journal of Rhetoric, Technology, and Pedagogy, 18*(1). http://kairos.technorhetoric.net/18.1/coverweb/yergeau-et-al/pages/mod/index.html

Lamey, A. (2015). The philosopher as teacher: Video feedback in philosophy. *Metaphilosophy. 46*(4-5). 691-702.

Mahaffey, C. & Walden, A. (2019). #teachingbydesign: Complicating Accessibility in the Tech-Mediated Classroom. In K. Becnel (Ed.), *Emerging Technologies in Virtual Learning Environments* (pp. 38-66). IGI Global.

Peters, D. (2014). *Interface design for learning: Design strategies for learning experiences*. New Riders.

Snart, J. A. (2010). *Hybrid learning: The perils and promise of blending online and face-to-face instruction in higher education.* Praeger.

Thomas, R. A., West, R. E., & Borup, J. (2017). An analysis of instructor social presence in online text and asynchronous video feedback comments. *Internet and Higher Education*, *33*, 61-73. https://doi.org/10.1016/j.iheduc.2017.01.003

Tobin, J. T., & Behling, K. T. (2018). *Read everyone, teach everyone: Universal design for learning in higher education.* West Virginia University Press.

Warnock, S. (2009). *Teaching writing online: How and why*. National Council of Teachers of English.

Appendix: Step-by-Step Guides

Using OBS to Create Videos

Step 1	Step 2	Step 3
Download OBS Studio Go to: https://obsproject.com/ Choose your operating system (Windows, Mac, or Linux) **NOTE**: OBS requires a one-time download with no account. After that, it runs on your computer without the need for web access.	**Install OBS Studio** Find the OBS file in your Downloads folder Double-click the file to begin the install Select "Optimize just for recording" for Usage Information	**Run the Wizard** The auto-configuration wizard will execute a set of tests and than recommend settings for your recordings. Click "Apply Settings" to accept them.

Step 4	Step 5	Step 6
Launch the OBS Application Find the application in your files and open it. **NOTE:** OBS creates a "recording window" that runs beside the "capture window." Using two monitors or a widescreen monitor works best.	**For Screen Capture** Click + in the "Sources" box at the bottom of the window. Select "Window Capture" and then "Create new." Click OK. Open the drop-down menu beside "Window" and select the application you want to capture (Chrome, Word, etc.). Click OK.	**For Webcam** Click + in the "Sources" box at the bottom of the window Select "Video Capture Device" and then "Create new." Click OK. Open the drop-down menu beside "Device" and select your webcam. Click OK.

Step 7	Step 8	Step 9
For Webcam and Screen Perform Steps 5 and 6 in order, adding both options to your "Sources" area. **NOTE:** Make sure "video capture" is the first source and "window capture" is the second source.	**Adjust the Capture Window** Reduce the size of your browser window, slideshow, or document window so that it all shows up in the recording window.	**Adjust the Recording Window(s)** Press "alt" to crop the screen and/or webcam. Click and hold to move the screen and/or webcam. Drag the corners to resize the recording window.

Step 10	Step 11	Step 12
Check the Audio Settings Select "settings" in the right hand menu. Select "Audio" and make sure your mic is selected in the "Devices" section.	**Record Your Video** Select "Start Recording" in the right-hand menu The recording will start immediately	**While Recording** Use the "||" button to pause and restart. Note the indicators at the bottom of the recording window that show when you're recording and when you're paused.

Step 13	Step 14	Step 15
End Recording Click "Stop Recording." The software will instantly add the recording file to a folder called "Movies." Don't close the OBS software yet.	**Convert to MP4** OBS records in .mkv format but .mp4 is best. With the OBS recording window active, click "File" in the menu at the top your monitor and then "Remux Recordings."	**Remux the Recording** Find the video file in your Movies folder and drag it to the left column titled "OBS Recording." then click "Remux." The mp4 file will be in your Movies folder along with the .mkv file.

Using Screencast-O-Matic to Create Videos

Step 1	Step 2	Step 3

Go to Screencast-O-Matic Homepage
Go to:
https://screencast-o-matic.com/

No need to create an account

Select "Start Recording for Free"

Then select "Launch Free Recorder"

If this is your first time using Screencast-O-Matic, you'll need to download the application

(One-Time) Download the App

Depending on your security settings, a series of pop-up windows may appear, asking for permission to access your files, webcam, and screen.

Step 4	Step 5	Step 6

Select Your Recording Options

Choose from Screen, Webcam, or Both

Don't adjust "Max Time" or "Size"

Click "Narration" to choose your mic

Don't adjust "Computer Audio"

(Optional) Adjust Preferences

Take note of the various hotkeys and other options. If you're new to Screencast-O-Matic, avoid adjusting these until you gain some practice with them.

Adjust the Recording Window

Move the window and/or increase or decrease the size using the corner and side adjustments.

If your recording window is too small, your video will be blurry when viewed via full-screen.

Step 7	Step 8	Step 9

Record a Test Video

Click the red "Rec" button under the recording window.

A 3-second countdown will begin.

Record a few seconds and then click "||" under the recording window to pause the recording.

Preview Test Video

Once the video is paused, click to play to view your recording.

Check for clear audio and visuals.

If adjustments are needed, click the trashcan icon and re-adjust your settings.

Adjust the Recording Window(s)

Press "alt" to crop the screen and/or webcam.

Click and hold to move the screen and/or webcam.

Drag the corners to resize the recording window.

Step 10	Step 11	Step 12

Restart Recording

Use the "|<" icon to reset the recording to 0:00.00.

Click the red "record" button.

Choose "Yes, truncate" to record over your test.

Your countdown will begin.

Record Your Video

If you make a mistake while recording, you can pause and shift the timer back to record over your mistake.

NOTE: Everything past that point in your video will be deleted. Use caution when with this tool.

End Recording

Click "Done."

Choose "Save/Upload."

Select "Save as Video File."

Step 13	Step 14	Step 15

Select Publish Options

"MP4" is recommended "Type."

Update "Filename" as desired.

Select the "Folder" you want to save the file in.

(Optional) Upload Captions

Select "Open Captions" to upload a pre-prepared transcript file.

NOTE: The file must be .txt, .sbv, or .srt.

"Publish" Your Video

This saves the file to your local computer or uploads it according to your selection.

Using Zoom to Create Videos

Step 1

Open and/or Download Recording Tool

Go to: https://zoom.us/signup

Sign up for an account.

Step 2

Create a Meeting

Click "Schedule a New Meeting"

NOTE: Do not click "record the meeting automatically on a local computer" because the recording will start immediately upon entering.

Step 3

Set Zoom Meeting Options

Fill out relevant information, especially:

"When" - day/time you want to record

"Video" - Host "on"

Click **Save.**

Step 4

Enable Advanced Settings

Click "Settings" on the left side toolbar:

"Host Video" - on
"Annotations" - on
"White board" - on
"Closed Captions" - on
"Save Captions" - on

Step 5

Pre-Recording Prep

Prepare visuals- such as assignment guidelines or PowerPoint presentation, open browser windows and/or assignment documents.

Step 6

Start the Meeting

Click "Meetings" on the left toolbar.

Click "Start" for the meeting.

Step 7

Check Audio

Click the carrot next to the microphone on the bottom toolbar.

Choose your speakers & microphone.
Choose "Test Speaker and Microphone" and follow directions.

Step 8

Check Video

Click the carrot next to the video on the bottom toolbar.

Enable front camera.

Enable virtual background if you wish.

Click the video icon to turn on video.

Step 9

To Create Captions

1) You can type them.

2) Someone else in the meeting can type them.

3) You can use a third party CC Service if you have an API token.

Step 10

To Record

Click the record button at the bottom of the screen.

Warning: there is no way to rewind the video if you make a mistake.

Step 11

To Pause the Recording

Press the Pause button on the bottom toolbar or the top left of the screen.

Step 12

Share Screen

Click Share Screen on the bottom toolbar.

Click the page you would like to record.

You can pause or stop the share of your screen to go back to your webcam.

Step 13

To End the Recording

Click Stop Recording.

Click the red End button at the bottom right.

Step 14

To Finish

A window will appear alerting you that Zoom is converting your video to an MP4 file.

This may take awhile.

Save the video to your computer.

Using Screencastify to Create Videos

Step 1	Step 2	Step 3
Download Screencastify This tool is a Chrome extension, so use Chrome as your browser. Go to https://www.screencastify.com/ Click "Add to Chrome" in the top right.	**Add to Chrome** In the new window, click "Add to Chrome." Click "Add Extension."	**Start the Setup** Click the red arrow with the camera at the very top Chrome toolbar. Enable "Automatically save videos to Google Drive." Sign in with your Gmail account.

Step 4	Step 5	Step 6
Set Permissions Enable "Camera and Microphone." Enable "Drawing and Annotation Tools." Click **Next.**	**Changes to data window** Click "Allow" "The ability to 'read and change all your data on the websites your visit'. We ask for this permission in order to embed our annotation tools and webcam into your current Chrome tab. Screencastify never monitors, stores or tracks your browsing information." from https://help.screencastify.com/article/251-why-do-you-ask-for-chrome-permissions.	**To Introduce Yourself** Click **Educator.** Click the level of education you teach on the next screen.

Step 7	Step 8	Step 9
To Begin Click the Red Arrow at the top right of the Chrome toolbar.	**Enable Options** Click the three horizontal bars to open the options window. Enable "Google Drive." Enable other options as you wish.	**To Begin** Click the red arrow at the top right of the Chrome toolbar again Choose browser, desktop, or webcam NOTE: Your webcam can be taped along with the Desktop.

Step 10	Step 11	Step 12
Enable Mic and Click Select to choose Microphone and camera.	**More Options** Click "Show More Options." Enable Countdown, Drawing Tools, and Audio.	**To Record** Press Record. Choose what visual frame you want to record. Click "Share" and recording countdown will start.

Step 13	Step 14	Step 15
To Pause The red arrow at the top includes a red dot to show recording has started. Use || to pause recording at the bottom left along with annotation tools.	**To End Recording** Press "Stop Sharing" bottom at the bottom of the screen. Trim part of the video off by using the cutting tool or skip to save the video.	**Save, Download, or Publish** The screen at the right allows you to save to Google Drive, publish to Youtube, email, get an embed code, download an MP4 or audio only file.

Uploading to YouTube

Step 1	Step 2	Step 3

Create or Login to YouTube Account

Go to https://www.youtube.com/.

Click "Sign In."

Upload a Video

Click the video camera icon with the + symbol on the toolbar at the top right.

Select "Upload Video."

Select Video

Click "Upload Video" to open dialog box on your computer.

Drag and drop or select your video file.

Note: Keep all videos in one file locally so you can access them easily.

Step 4	Step 5	Step 6

Choose Details for the video

Add a clear title and description of the video, and check audience selection.

Click **Next.**

Note: Other info is optional by expanding OTHER OPTIONS feature.

Add Video Elements

Choose "Add end screen" if you would like to point students to another video.

Choose "Add card" if you would like students to take a poll during the video.

Click **Next.**

Choosing Visibility

Click "Private," "Unlisted," or "Public."

Click **Save.**

Note: Unlisted will allow only your students to see your video with the link you provide.

Step 7	Step 8	Step 9

Video Published

Copy the url or the embed code for your students.

Click **Close.**

Note: An embed code allows students to watch the video in the LMS. This is especially important if you have international students who can't access Youtube.

Wait for Auto-captions

The process is now automatic, but it may take up to an hour depending on the length of your video.

Note: Captions are vital for accessibility.

Find the Auto-Captions

Go to "Your Videos."

Click the blue "Edit Video" button under the video.

Click "Subtitles" in the left menu.

If the auto-caption is complete, you'll see "English (Automatic)."

Step 10	Step 11	Step 12

Open the Auto-Captions

Click "Duplicate and Edit."

Optional: Click "Assign Timings" if you prefer to see the video timestamps. If you want to copy this as transcript, it's best not to assign timings.

Edit the Auto-Captions

Edit the captions in the left column.

The right column will show you what the captions look like on the video.

Look for the following errors: wrong word, missing capital letters, punctuation, etc.

Copy the Captions

Copy the captions and paste them onto a document for your transcript.

You can clean up the text as desired for readability.

Step 13	Step 14	Step 15

Publish Edited Captions

Click "Publish."

Note that you now have two caption files - (1) English (video language) Published by Creator, and (2) English (Automatic). Delete the second one.

Return to YouTube

Click the video thumbnail in the top left and click the play button.

Optional: Preview the video and repeat steps 9 through 13 if edits are needed.

Share or Embed Your Video

Click "Share" under your video and copy the link.

Click "Embed" to generate an embed code.

NOTE: Some LMS platforms automatically embed YouTube videos via the link.