Welcome to Studio U! Use this guide to help you get started with self-service video production.

Running Time and Story Considerations

Ideal length: Less than 8 minutes

We have found that videos less than ten minutes in length are the most effective, and 6-8 minutes is even better. If your presentation will take more than eight minutes, try to split it up into two or more mini-lectures. Approximate your running time by rehearsing your video, or at least timing one representative page or scene of your notes and projecting that to a total running time to see if you’re in the ballpark.

Engage your viewer’s curiosity

Try to make each mini-lecture a story. If you can find a way to add some suspense, or ask a provocative question, or challenge an assumption or misconception, it will be more engaging for the viewer.

Video Types

**Learning Glass:** The presenter is seen through a clear glass writing surface and writes on the surface with colored markers. For material that lends itself to a lot of freehand writing and diagrams, this is a great choice.

**Green Screen:** The presenter is superimposed in front of or next to slides or other graphics from a computer source. Best for videos with visuals that do not lend themselves to recreating in freehand or photo/video content. With Green Screen, you can also use the tablet screen to annotate your slides as you present.

**Screen & Voice Capture:** Only the presenter’s slides or screen graphics are seen while the presenter narrates. Works well for material with a lot of annotation, otherwise, it may not be very engaging and Green Screen should be used if possible.

**Hybrids:** With good advance planning, you can also design hybrid videos, where you combine the above methods within one video to best suit the information being presented.

USB Drive

As you record, the video file will be saved on your USB “thumb” drive as a universally compatible mp4 file format. To ensure there aren’t errors during recording, the system requires a USB 3.0 device, formatted FAT32 or NTFS, and will need roughly 1GB per hour of recording time. The recommended USB drive is a [SanDisk Ultra CZ48 32GB USB 3.0 Flash Drive](https://www.sandisk.com/products/flash-drives/san-disk-ultra-cz48-usb-3-0-flash-drive) or an equivalent capacity/speed rating.
Scripting

We recommend scripting your video in advance, either bullet points in an outline or word-for-word.

If using Green Screen with slides, make your slides as visual as possible; for example, using pictures or easy to read, well organized, text. It’s better to break your presentations up into more slides with less dense information than try to fit all of your information onto fewer slides. (Slides that won’t have a lot of annotation should not be up for more than a minute.) For the best results, the aspect ratio should be widescreen (16:9). Use simple backgrounds and large, bold fonts (preferably at least 24 pts and sans serif).

If using the Learning Glass, sketch out beforehand what will be on the glass for each scene.

- Write out what will be on each panel of the glass (see templates at the end of this guide). One of the best ways to do this is to practice using a chalkboard or a whiteboard. The Learning Glass is 3’x5’ (for safety plan on leaving at least a 2” margin inside those dimensions on all sides). If using chalk or whiteboard, snap a photo of each panel when you’re done, and print those out to bring with you for reference.
- Design a layout that leaves room for a home base where there isn’t any writing from your chest to the top of your head. This is where you will stand when you’re mainly speaking to the camera rather than writing. This can be on the far left for right-handers (or far-right for lefties). Or leaving room in the center works well, especially if you can put the pre-written content on the opposite side of your writing hand.
- Leave space for captions on your video by keeping the bottom 15% of the glass clear from writing.
- Decide what you can have pre-written on screen before you start the recording, so you don’t spend a lot of time on camera writing rather than speaking.
- When writing, plan not to write anything at face level all the way across so you can make eye contact with the viewer and they can see your mouth when you talk, regardless of what part of the glass you’re behind at that time. (If you need to put something at face level, a simple graph would be better than a dense equation.)
- Print out easy-to-read, large-print notes that you can refer to while filming at the glass. The table allows you to place notes and the panel templates in front of you while you record.

Regardless of your scripting style, some rehearsing on your own beforehand will save you time in the studio. Whenever you’re not writing or annotating, practice making good eye contact with the viewer by looking at a mark on the wall as if it is the camera/viewer.

While you are rehearsing, think about bringing as much of the energetic side of your personality to the presentation as possible. Similar to an in-person lecture, the more enthusiastic and passionate you are in your delivery, the more engaging it will be for the viewer. Be animated – hand gestures are great.
Wardrobe

- In general, avoid blacks, whites, logos, thin stripes, and other busy patterns. **For the Learning Glass, wear darker, solid colors. For Green Screen, avoid all shades of green.**
- Do not wear clothing or jewelry that makes a lot of noise or is highly reflective.
- If you use vision correction, non-glare, non-photochromic lenses or contacts are preferred.
- Hair: If you’re doing Green Screen, hairstyles without a lot of see-through areas or flyaways are best.

During Recording

Many presenters find it helpful to have another subject matter expert sit in on their recording session (usually a T.A. or grad assistant). It’s much easier to correct any accidental speaking or writing errors while recording than to try to fix them in editing later on.

For discussion purposes, think of all the talking you do for one slide of Green Screen or one panel of the Learning Glass as a scene. Ideally, you’ll be able to cover all of each scene in one take or by using the pause option during recording to check your notes and then resume the scene.

When you stumble on your wording, if you just matter-of-factly correct yourself and keep going as you would while lecturing, chances are it will be fine. If you act nervous or embarrassed by the error, you will end up feeling like you should stop the recording and start over with a new try.

If using the Learning Glass, plan to return to your “home base“ (the area without any writing) when you’re not writing in order to be easily visible to the viewer.

Additional Tips from the Former Center for Teaching Development

For each video series:
- Decompose the overall problem into parts/ Identify variations on solution options.
- Create an overview video to lay out problem process/variations (the set of videos to come).
- The overview should show a problem, start state, what ending state or solution type should look like/mean, perhaps have an overview diagram (show where problem statement components map/fit onto diagram).

For each video:
- Outline the subgoals (in meaningful English words) -- Suggest numbering them
- Plan work area to enable connection to subgoals
- Plan explanation area to the side of the work area
- Identify what can/should be pre-written
- Identify color changes/how to draw distinction/connections through the use of color
- Plan places to ask students to make a prediction/explanation before you provide it
Learning Glass Panel Templates

Sample Panel Showing Content Areas

Velocity vs Time

Velocity = 30 m/s
angle = 45°
mass = 35 kg
Height = 0
Height = 0
t = ?

Home Base area

Problem solving
or active writing

Only write in caption area if needed

Best prewriting area

Best Home Base area

Best active work space

\[ d = v_i t + \frac{1}{2} a t^2 \]
\[ \text{solve for } t \]
\[ t = \frac{\sqrt{2} \cdot 35 \cdot 0 - d}{-9.8} \]
\[ t = 1.8 \text{ seconds} \]
Blank Panel
Template for Panel Series w/ Notes

Video: ____________________________  Glass #: □

Notes: