

VISUAL MEDIA ASSET REQUIREMENTS

This article provides good practices and standard requirements related to visual media (photos, graphics and video) or off-the-shelf products such as Captivate® or Articulate® that are published as a e-learning asset or custom course.

CHOOSING APPROPRIATE MEDIA

The media you choose for your course should be:

- **Applicable and relevant to the “important instructional content” on the page** (Clark, 2008). A decorative (extraneous) image such as an image of a butterfly for a lesson on environmental health counteracts the learner’s ability to comprehend the pertinent content (Mayer, 2009).
- **Augmented to enhance the learning topic.** “Meaningful learning occurs when learners build systematic connections between ... [words and images]” (Mayer, 2009).
- **Accessibly compliant.** Include alt tag statements that reflect the context to media connection. “When determining appropriate alternative text for images, context is everything” (Webaim, 2015). Include alternatives for time-based media such as video or audio (i.e. closed-captioning, transcriptions, text alternatives, etc.) (Webaim, 2015).
- **Sized appropriately.** Images that are too small can rarely be “upsized” to produce a quality image for your course.
- **High Quality.** Images that are fuzzy, blurry or unclear cannot be accepted. Here are some tips for producing higher quality images:
 - Provide originals whenever possible.
 - Do not reproduce images directly from Microsoft Office (MSO) products such as Word or PowerPoint. (MSO greatly reduces the original quality).
- **Copyright Permitted.** Do you have the right to use the audio, image or video media? “... Most of the media you find [on the web] is covered by some sort of copyright. ... [You’ll] probably require the owner’s permission before you can use the image. ...even [fair use](#) has its limits ...” ([Digital Learning Series](#), 2013). Here are some things you can do to insure you have permission to use the media:
 - Personally create original media (image, video, music, etc.) (i.e. no [derivatives](#))
 - Obtain copyright free media managed by a [Creative Commons](#) permit
 - Obtain copyright free media authored by a government entity
 - License the media through a stock media vendor
 - Acquire licensing or copyright release directly from the copyright owner

For the purpose of this document, media is divided into two categories, images and video. A brief overview of each category type and associated standards are described below.

IMAGES

The images category includes all static visual media types such as photographs, graphics (drawings, illustrations, diagrams), and screen shots (i.e. screen captures).

Photographs

Photographs of people, places or things are best displayed in the JPEG (.jpg) format.

Though the PNG (.png) 24bit format supports a wide range of colors and continuous tones similar to a JPEG, PNG tends to result in larger file sizes for photographic type images because it includes a transparency channel and uses “lossless”, non-destructive, compression techniques to manage file size.

JPEG does not support transparency and uses a “lossy”, destructive, compression technique that selectively deletes data, resulting in a smaller file size of decent quality.

TIPS:

- If you “downsize” your original JPEG to conform to our standards, please do so with the highest compression quality (12) available in your software.
- Never save, copy, or send an image that originated in an MS-Office (MSO) application such as MS-Word or MS-PowerPoint. MSO applications greatly compress the images imported into them.

Minimum standards for photographs:

- Format: .jpg (highest quality compression)
- Image displayed up to ½ of course page
 - If landscape, then minimum width = 350 px dpi = 72
 - If portrait, then minimum height = 260 px dpi = 72.
- Image displayed full size of course page or used as image map
 - If landscape, then minimum width = 880 px dpi = 72
 - If portrait, then minimum height = 260 px dpi = 72
- Clear and sharp quality

Graphics

Graphics such as drawings, illustrations and diagrams are best displayed in scalable vector graphics (SVG) format. SVG, PNG and GIF (.gif) all support transparency. SVG provides extremely sharp and resizable graphics, though it is a fairly new format. The PNG format produces a clean edge where the image meets the transparency, but it must be sized according to its intended use. GIF edges are jagged.

The SVG format:

- Supports a wide gamut of colors, including gradations
- Creates very small file sizes that are sharp even when zoomed in
- Yields highest quality image regardless of screen resolution
- Customizable XML format
- Supports clear backgrounds (transparency)
- Supports interactive animation

The 24-bit PNG format:

- Supports CU branded colors (8-bit PNG does not)
- Creates fairly small file sizes when used for graphics (typically larger than GIF)
- Yields higher quality image than GIF
- Supports photo-quality image
- Supports clear backgrounds (transparency)

The GIF format:

- The 256 color GIF supports CU branding (other GIF color selections may not)
- Creates fairly small file sizes
- Yields lower quality image than PNG
- Supports solid colors and gradations only (no photo quality)
- Supports clear backgrounds (transparency)
- Supports simple animation

Minimum standards for graphics:

- Formats: .svg, .png (24 bit), .gif (perceptual, 256 colors)





- .png or .gif image displayed up to ½ of course page
 - If landscape, then minimum width = 350 px dpi = 72
 - If portrait, then minimum height = 260 px dpi = 72
- .png or .gif image displayed full size of course page or used as image map
 - If landscape, then minimum width = 880 px dpi = 72
 - If portrait, then minimum height = 260 px dpi = 72
- Clear and sharp quality (fuzzy graphics will not be accepted)
- Includes transparent background when required

Screen Shots/ Screen Captures

Though the 256-color GIF format is acceptable, screen capture (screen shots) images display best in 24-bit PNG format, due to their clean edges. The same features apply to screen capture file formats as those listed above for graphic images.

TIPS:

- Use a clear and sharp computer monitor.
- Set your monitor resolution to get the [best possible display](#) for your monitor type, CRT or LCD, before capturing screen shots (Windows, 2014).
- Use a tool such as SnagIt (Windows) or Snapz Pro (Mac) to capture screenshots, instead of standard keyboard shortcuts.
- Save as 24-bit PNG (non-destructive format) – not JPEG (destructive format) (Arandilla R, 2011).
- Save unedited*, as full captured size using the naming convention [my_filename]_orig.png.
- Save the edited version (24-bit PNG), as full captured size using the naming convention [my_filename]_edit.png.
 - Use your tools editor to add callout boxes, arrows, boxes, etc. you want included in the course
- Turn off image compression in the MS-Word script.
 - File > Options > Advanced > Image Size and Quality
 - Set “default target output to:” 220ppi
- Insert the edited version into the context of your course script.
- Click on the imported image and adjust its sharpness and contrast using MS-Word’s Picture  Corrections tool  in the course script.
- Send both the original and edited files, along with the course script, to ELD

*Original screen captures may be needed if it becomes necessary to recreate your edits with styles (color, font, etc) that are compatible with the course styles.

Minimum standards for screen captures:

- Formats: gif (perceptual, 256 colors), .png (24 bit),
- 800x600x72dpi minimum (preferably 1024x800)
- Clear and sharp quality (fuzzy screen shots will not be accepted)

VIDEO




Three Models

There are three models available for including video within the Skillsoft® custom courses. Closed captioning and descriptive audio (when applicable) is required for each model, which can be toggled off or on by the learner (on is the default). The player size is fixed for each model.

Model one presents the video and player on the right side of the screen and auto-plays when the page loads. Video width must be 560px.

Model two places an image on the right side of the screen and launches the video in its own screen-centered window when the learner clicks on the image. Video widths must be 560px, 640px or 768px, depending on the size you provide.

Model three allows for a larger, full course-page, video and player which auto-plays when the page loads. Video width must be 768px.

		
Model 1	Model 2 (width=640)	Model 3

Accessibility Compliance

WCAG2.0 A and AA Accessibility compliance (WCAG20, 2018) is required for all videos and audio incorporated into custom courses.

There are two types of captioning used with video; closed captioning or open captioning. Only closed captioned video is used in the Skillsoft® custom courses. In many cases a description video may also be required. For details about video description and how to meet that criteria please visit [digitalgov.gov](https://www.digitalgov.gov).

Minimum standards for video are:

- Formats: mp4, .webm, .webmv, .ogg, .ogv
- Widths: 560, 640, 768 (depends on preferred video model)
- Skillsoft® hosted
- Must include closed captioned file (.src, .vtt) (see [cc creation](#) or [cc converter](#))
- Must include associated, time-coded transcript file (.vtt)
- Must include audio description file (video or .vtt alternative)

Minimum standards for audio only are:

- Formats: mp3, .ogg, .oga, .wav
- Must include associated, time-coded transcript file (.vtt)
- Must include audio description files when [WCAG2.0](#) applies (.vtt)



CAPTIVATE® OR ARTICULATE® CONTENT

Off-the-shelf Products

Off-the-shelf products such as Adobe Captivate® or Articulate® can be used by non-ELD instructional designers (ID) or subject matter experts (SME) to create courses that will reside in the universities learning management system, Skillsoft®. It is important that any off-the-shelf projects meet, or exceed, ELD requirements.

Common Standards:

- Be published as HTML5 only
- void of all flash content
- Meet WCAG2.0 AA accessibility guidelines ([Captivate®](#), [Articulate®](#))
- Sized at 1024x768
- Comply with university/campus branding

References

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