Recommended Equipment, Video Formats, and Settings

Video-Recording Equipment

The Stanford Center on Assessment, Learning, and Equity (SCALE) does not specify the use of any particular equipment, software, tutorials, etc.; although only certain file types are accepted, as outlined below. An expensive camera is not necessary for the demands of this assessment. Many cameras in laptops, tablets, and phones are capable of producing a picture and sound quality that is suitable for your video needs. However, certain situations (e.g., groupings where the students are not facing the camera microphone, table groups where many students are talking at once, lots of ambient noise) may necessitate the use of some kind of external microphone. The only way to know for certain what is working is to try out the equipment **in advance**.

Acceptable File Formats

Video recordings may be submitted in the following file formats:

flv, asf, qt, mov, mpg, mpeg, avi, wmv, mp4, m4v

Recommended File Formats

Please refer to your video camera's user manual or specifications to determine the video format recording options.

Use of a digital camera or video camera that supports the following is recommended:

Video File Type	Common File Extensions	Video Codecs	Media Player Support*
AVI – Audio Visual Interleave	.avi	wide variety; DivX, MJPEG are common	Supported by variety of media players including Windows Media Player
QuickTime Content	.qt, .mov	H.264	QuickTime
MPEG-4	.mp4	MPEG-4 AVC/H.264 or MPEG-4 ASP	QuickTime, Windows Media Player
WMV – Windows Media Video	.wmv	WMV	Windows Media Player

* These video formats are supported by a number of media players. Only the more common players are listed here for reference.

Recommended Media Format

Because it is best to upload video in its original format, the recording settings should match the recommended format and resolution. This way the digital file created when you record will meet the suggested specifications without any additional effort or conversion on your part.

- **Bitrate:** To ensure your video meets the file size requirements, we recommend a video bitrate of 256Kbps. Candidates seeking to increase the visual quality of their video clips may use higher bitrate settings, but please be aware that this will result in a larger file which may exceed the file size requirement or be more difficult to upload.

- **File Size:** The target file size is 200–300 MB or less.

  You may need to use video tools to compress or transcode your video into smaller file sizes to facilitate uploading of the video. The Pearson ePortfolio System file size limit is 500 MB.

- **Resolution:** To achieve the target file size, be sure to set the proper resolution before you start recording. Commonly used lower resolutions like "320 x 240" and "640 x 480" will yield the best results. Higher resolutions and "HD quality" will produce file sizes too large to be conveniently uploaded, and should be avoided.

- **Frame Rotation:** We recommend shooting video in landscape aspect ratio.

- **Frame Rate:** We recommend shooting in or encoding to 24 (23.98), 25, or 30 (29.97) fps. 30 fps is common.

- **Pixels:** Non-square (anamorphic) pixels are handled automatically.

- **Deinterlace:** Interlaced videos are handled automatically.

- **Keyframes:** Keyframes can be set to automatic on device.

Cameras with Multiple Microphones

Videos created by a consumer-grade camera with two or more connected microphones should generally produce an acceptable video. However, candidates must ensure that their final video file contains only a single audio track.

If multiple audio tracks were created when shooting the video:

1. Use a video editing tool to produce a new video with a single audio track. The video submitted must contain a continuous, uninterrupted clip.

2. Play the video immediately after saving it with a single audio track and before uploading it to make sure it plays as intended.

3. Upload the video to the Pearson ePortfolio system and before submitting for scoring, play the entire video to ensure that the video plays as intended with a single audio track that can be clearly heard by a scorer.