

Using Digital Video



In Early Care and Education and Early Intervention

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Why use video?

Video can be a very useful tool for practitioners and teams working with young children and their families. Among the many purposes of using video are:

Evaluation and assessment/service planning: Purposes might include: document observations; capture a child's behavior as the child participates in typical routines, activities, and relationships; ask families to video tape the child participating in a typical family routine; for an assessment that involves multiple providers, have one assessor video the child without the presence of an intimidating number of unfamiliar people – the video can then be used to gain the input of practitioners who did not attend the assessment session; showing at individualized planning meetings, transition meetings, etc.

Team consultation: Video can help families, teachers, child care providers, and early intervention practitioners benefit from the expertise, perspectives, and ideas of other team members. Video allows other team members to see the child “in real time,” in the context of everyday routines, activities, and relationships, so practitioners have enough information to offer input.

Family education, collaborative planning, informational support, and joint problem solving: Videos of children can be watched by families and practitioners together to plan intervention strategies and solve problems together. For instance, families have told us that watching videos of their children (and themselves) with their early intervention team helps them feel like an equal member of the team. Video shot at a home visit can be shown to other family members who were not able to attend the visit.

Progress monitoring: Video can be a very useful tool for collecting and organizing observational information for ongoing authentic assessment. In addition, families report that they appreciate having the video documentation of their children's progress.

Professional development: Videos of children and families in context of their typical daily routines and activities as well as interacting with service providers can be used to orient and train practitioners in a variety of competencies. Video clips can be used for online, workshop, and conference presentation.

Self-reflection: Some providers video their interactions with children and families and watch them later to better understand their strengths and areas for improvement.

Coaching: Video is used for both live and asynchronous coaching. A coach might watch a live video feed or a recorded video clip.

Supervision/reflective supervision: Videos can be powerful tools that enhance reflective supervision and peer-to-peer support.

Research: Video is frequently used as a data collection method for both formal research protocols and more practitioner directed action research projects.

Service Delivery: Some early intervention practitioners are exploring the use of video conferencing for “virtual home visits” to provide more frequent contact with families who live in remote areas.

Results Matter Video Library

Includes several videos illustrating the uses of video in early care and education and early intervention: <http://www.cde.state.co.us/resultsmatter/RMVideoSeries.htm>



Assure that families understand and consent to the use of video

Provide information early on, while building your relationship with the family, to help families understand the uses and benefits of video; don't wait until a visit in which you will want to video. Discuss the many potential benefits of using video:

- A way to get perspectives and ideas from all team members.
- A strategy to equalize the roles of family members and practitioners as they both become collaborative “watchers” and assessors. Video allows the entire team (including the family) to look at the child together and encourages collaboration in developing individualized plans and solving problem. Video shot at a home visit can be shown to other family members who did not attend the visit.
- Documentation of their child's development and progress (a copy of all videos should be given to the family).
- Tools for professional development and supervision.

ALWAYS obtain the family's written consent before videotaping or photographing.

- Always use a consent form. Assure parents that video will only be used with their consent for the specific purposes outlined in your consent form, e.g. at team meetings, to be shared with other assessment and/or intervention partners, for supervision, as parts of professional development, etc.
- In addition to a consent form, it is often useful to offer parents an information sheet that describes the “who, why, and what” of videotaping and how videos might be used.
- Teams that are part of health systems will need to be sure that their consent form is compliant with the Health Insurance Portability and Accountability Act (HIPAA) regulations. For more information visit: <http://www.hhs.gov/ocr/hipaa/>
- Be sure to have your consent form approved by your program's administration and, if applicable, legal department.

Note: In addition to obtaining families' written consent for their children, obtain written consent for all others everyone who will appear in your videos, including parents, staff members, etc.



Sample consent form

Consent forms need to be customized for each organization and for the various purposes for using video. Below is sample wording form a relatively formal form that was used for the purpose of capturing video to be used for public awareness, stakeholder engagement activities, professional development, and/or project reporting.

Video/Photo Consent

I hereby voluntarily grant my permission to the [name of organization], their agents, employees, licensees, and assigns to photograph or video tape myself and/or the child named below.

I understand that the interests of the early childhood care and education field will be advanced by the use of the video and/or photos covered by this consent.

I understand that all rights, title, and interest in these video and photographic images belong exclusively to the [name of organization] and that this group reserves the right to edit the images. I understand that these materials may be used by this organization in printed or electronic form for public awareness, stakeholder engagement activities, professional development, and/or project reporting. In the event consideration is paid or received for use of the images, I shall in no way be entitled to any part of such consideration.

I acknowledge that I am fully aware of the contents of this consent and am under no disability, duress, or undue influence at the time of my execution of this instrument.

Child's Name in Full (Please Print): _____

Parent/Guardian (Please Print): _____

Address: _____

City, State, Zip: _____

Phone: _____

Parent/Guardian Signature: _____

Date: _____



Basic tips for videotaping

You don't need to worry about producing broadcast quality documentaries. But a little quality will make your videos more useful. Here are some general guidelines.

Learn how to operate the camera

Learn how to operate the basic functions of the camcorder, including turning the camera on and off, zooming, charging and changing the batteries, using the viewer, etc. Also learn how to connect the camcorder to a TV monitor and use it in VCR mode.

Avoid jerky motion

When you will be videotaping just the child and the family, you might handhold the camera. Practice pointing and shooting the camera in ways that avoid jerkiness and excessive camera movement by stabilizing your arms against your body or a piece of furniture.

Bonus Tip: Use a tripod:

In September, 2009, the Sunpak 620-786 Mini-Spider Tripod was available at Amazon.com for only \$1.25:

http://www.amazon.com/SunPak-620-786-Sunpak-Mini-Spider-Tripod/dp/B00009W3TY/ref=dp_cp_ob_e_title_3?ie=UTF8&qid=1253125882&sr=8-1

Frame the shot

Be sure to capture the action that you and other viewers will need to see. Avoid "cutting off people's heads" or shooting their backs rather than fronts. With young children it is sometimes helpful to shoot from a position on the floor.

Be aware of lighting

You will get better results by being aware of the natural lighting and using it to your advantage, e.g. avoiding shooting into a window or direct sunlight.

Be still – use a tripod

When possible, use a tripod. This will be important if you video yourself interacting with children and families. Place the camcorder strategically so that it will capture all the action and you can just let it run.

Capture adequate quality sound

For many purposes it is important to capture good sound, e.g. children's language development, parent-child interactions, etc. Place cameras strategically, e.g. avoid videotaping right next to a blaring stereo.

Keep it authentic

Try to capture the child in context of typical routines, activities, relationships, and places. Most often, you will capture the child participating in activities with others. Only try to capture the child participating in a routine or activity alone, if that is what typically happens.

Keep the end in mind

Always keep in mind your purpose for videoing in the first place. Plan the shot and make your decisions based on achieving your goals.

Practice

Take some practice video and watch it with colleagues and get feedback on the technical merits of your work. Ask your colleagues what they might need to see in order to provide consultation on children. Practice enough so that you will be well at ease operating the camcorder.

Be prepared

Be sure that you keep blank tapes, charged batteries, a power cord, a charger, and consent forms on hand. For home-based providers, it might be useful to purchase a battery charger that can be plugged into a car so that batteries can be charged while traveling from visit to visit.

Avoid making a big production out of shooting

If you are practiced and prepared, videotaping should be a natural and comfortable process.



Create a system for labeling and storing your clips

Assuming that you will be using a camera that creates digital files:

- create a system for naming your files; and
- develop a system of folders for organizing and storing them.

Some Ideas for Labeling Digital Video Files

- Develop a consistent system for naming your video files. Then develop a system for labeling the various folders that you will use to organize these files.
- Be sure that each file name ends with the correct suffix (e.g., .avi for Flip or .mp4 for Sanyo)
- Do not use slashes (/) to separate parts of the file name. Use periods, dashes, or underscores.

One sample file naming scheme for clips of children:

Date the clip was shot	Child's name or initials	Content (e.g., behaviors, activity setting, assessment item, IFSP/IEP outcome, domain)	Extra notes (e.g., filmed by parent)	File type suffix (e.g., .avi for Flip or .mp4 for Sanyo)
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Examples:

Here are a few examples of different styles for labeling a clip from the Sanyo Xacti CG9 of Larry Edelman demonstrating how to name a video file:

05.07.09-EdelmanL-labelling a video file.MP4

05.07.09_LE_labelfiles_forvideographers.MP4

05.07.09.LE.labelvideofile.MP4



Getting started using video with your team

If your team has not used video before, consider some of the following steps.

- *Have each team member learn how to operate the camcorder.* There are a variety of ways to learn: play with it, read or refer to the manual, have a team member teach and coach you, ask your kids for help.
- *Have a team discussion.* Have your team brainstorm the various purposes for which you will use video. Have team members share what they need to see in the videos if they were to review them to offer consultation. Agree to a system for sharing the camcorder. Develop policies and procedures around the team's use of video. Invite parent representatives to offer their perspectives on your use of video.
- *Learn and practice shooting skills.* Set aside time at a team meeting to take turns videotaping in the classroom or a simulated home visit. Avoid just shooting still shots, shoot movement (team members can pretend they are kids or families). Watch the practice videos that you take as a team and offer each other accolades and constructive feedback on video techniques. Try shooting indoors and outdoors.
- *Develop materials for parents.* Create a consent form and get it approved by the administration/legal department of your agency. Consider producing an information sheet for families on the benefits and uses of video tape. Remember that you may need to have these print materials translated for families who do not read English.



Watching video with families and colleagues

Time is valuable; avoid wasting precious time with families and team members by having to search for specific sections of video clips that you want to show. Cue the video clips to the parts that you want to show before the meeting or visit. Some practitioners like to do simple edits (trimming away unwanted footage, pasting together key scenes, etc.) to the video before showing it. Following are some ways that families and providers members might watch videos together.

- The family and provider watch the video together.
- Early interventionists sometimes watch video clips with the family in their home.
- The video might be shared at a team meeting. If so, parents should always be invited to attend, but, if they prefer, they can rely on the provider to bring them the other team members' perspectives and ideas.
- Video shot at a home visit can be shared with other family members who did not attend the visit.
- Video can be shared with a team member with specific expertise to watch individually and provide feedback.
- Videos of children and families in context of their typical day are valuable professional development tools that can be used to orient and train new team members. You might have new team members watch videos alongside more experienced team members.
- Supervisors and practitioners can watch videos of the practitioner delivering services as part of reflective supervision. Along with key questions and open, supportive dialogue, video can help to promote self-knowledge and growth.
- Videos of team meetings can help team leaders and team members become more aware of their strengths and weaknesses and contribute to continual quality improvement.



Computer hardware for using digital video

This checklist outlines basic advice for hardware that works well for using digital video. Both PCs and Macs have their strengths and limitations and their advocates and detractors. Use the platform that works best for you AND is acceptable to your agency or program's IT policies and resources. Whichever you use, choose the most recent **DEPENDABLE** version of the operating system (not always the most recent) and configure the computer with enough power for the applications that you intend to use, and then some extra. Please remember that operating systems are updated continually.

To the extent that you can afford:

- Maximize the available processing speed
- Maximize the internal storage capacity (hard drive)
- Maximize the available memory
- CD-ROM/DVD drive for playing and burning
- High quality video and audio cards
- Enabled for wireless connection to internet
- Most recent version of connectivity (e.g. USB, Firewire) ports
- Purchase an external hard drive or two for storing/archiving video files



Computer software for using digital video

Please remember that applications and operating systems are updated continually and new software is published all the time. Software changes rapidly. Check often for new versions and updates. If you can't play a particular media file, check for updates for the program that you're using to play it.

Basic software

- Reliable Internet browser – There are lots of choices: Firefox, Safari, Chrome, Opera, Bing, Flock, Internet Explorer, etc. Personally, I for surfing the Net, accessing web-based applications, and streaming and downloading files I recommend Mozilla Firefox: <http://www.mozilla.com/> Here is a good article comparing the various browsers: <http://www.informationweek.com/news/internet/browsers/showArticle.jhtml?articleID=219400649&pgno=1&queryText=&isPrev>
- Adobe Flash Player – For viewing Flash video; most computers have this software loaded. Be sure to install the most recent update. If you don't, visit: http://www.adobe.com/shockwave/download/index.cgi?P1_Prod_Version=ShockwaveFlash)
- JavaScript – Required for viewing many web sites; most computers have this software loaded. Be sure to install the most recent update. Available at <http://www.java.com/en/download/manual.jsp>)

For playing media files

There are scores of free media players available. If you install the common ones below you will be able to most of the audio and video files that you will encounter.

- VLC Media Player – Even though you most likely use Windows Media Player and/or QuickTime, another player you should have is the free cross-platform VLC media player, a highly portable multimedia player for both Macs and PCs that play a very large assortment of audio and video formats: <http://www.videolan.org/vlc/>
- Windows Media Player – For viewing certain kinds of audio and video files; available from [http://www.microsoft.com/windows/windowsmedia/download/AllDownloads.aspx?displang=en&qstechnology=\)](http://www.microsoft.com/windows/windowsmedia/download/AllDownloads.aspx?displang=en&qstechnology=))
- QuickTime – For viewing certain kinds of audio and video files; available from <http://www.apple.com/>
Optional: You might also want to purchase the \$29 QuickTime Pro update from www.apple.com. QuickTime Pro makes it easy for you to play video clips at full screen, do basic editing functions, and lots of other tricks as well. Remember, though, that if you upgrade to Pro, every time that you upgrade to a major version of the free QuickTime software, you will also need to repurchase the \$29 QuickTime Pro upgrade.
- For Macs only, Perian is a free, open source QuickTime component that adds native support for many popular video formats: <http://www.perian.org>
- For PCs only, if you can't play a video, you can download and use gSpot to establish what video and audio codecs are required to play the file video: <http://www.videohelp.com/tools/GSpot>
- Also, for PCs only, K-Lite Codec Pack is a collection of codecs and related tools. Codecs are required to encode and/or decode (play) audio and video. The K-Lite Codec Pack is

designed as a user-friendly solution for playing all your movie files. With the K-Lite Codec Pack you should be able to play 99% of all the movies that you download from the internet: http://www.free-codecs.com/download/K_Lite_Codec_Pack.htm

Basic video editing and encoding

Be sure that you choose software that matches the kinds of video files that your camcorder produces (e.g., .avi, .mov, .asf, .mp4) and your platform (e.g. Mac or PC).

- ❑ Some camcorders come bundled with editing software, either “in-the-camera” or software that you can install.
- ❑ MPEG Streamclip – is a powerful video converter, player, and editor for Mac and Windows. It can play, edit, convert, and encode many movie files and can also download videos from YouTube and Google by entering the page URL: <http://www.squared5.com/>
- ❑ For PCs, Microsoft offers the free Windows Movie Maker (loaded on many computers along with the operating software) at: <http://www.microsoft.com/windowsxp/downloads/updates/moviemaker2.msp>
You may require additional software and/or hardware to import video from video tapes.
- ❑ For Macs, Apple offers iMovie which comes equipped on new Macs or can be purchased as a part of the iLife Suite of applications at <http://www.apple.com/>
- ❑ For both PCs and Macs, the \$29 QuickTime Pro update from www.apple.com enables basic editing functions and lots of other tricks as well.

Examples of video editing applications

Platform	Free	Low End	Mid Range	High End
PC	Windows Movie Maker (comes bundled with PCs) VirtualDub	Vegas Movie Studio Pinnacle Studio Corel VideoStudio Pro Cyberlink PowerDirector 7	Adobe Premier Elements	Adobe Premier Avid Media Composer Vegas Pro
Mac	iMovie (comes bundled with Macs)		Final Cut Express Adobe Premier Elements	Final Cut Pro Adobe Premier Avid Media Composer

Please note: The table above lists just some examples of the editing applications that you might consider; no endorsement is implied.

Web sites that list free video editing software:

- <http://tv.isg.si/site/?q=node/873>
- <http://desktopvideo.about.com/od/editingsoftware/a/freevidedit.htm>
- <http://jaypeeonline.net/freeware/free-video-editing-software-mac/>
- <http://www.desktop-video-guide.com/top-5-free-video-editing-software-review.html>
- <http://fancinematoday.com/2009/04/16/4-free-video-editing-programs-for-mac/>

Free applications that edit, play, convert and/or download video

- MPEG Streamclip: <http://www.squared5.com/>
- Savevid.com: <http://www.savevid.com/>
- Deturl: <http://deturl.com/>
- Mediaconverter: www.mediaconverter.org
- Listen to Youtube: www.Listentoyoutube.com
- FFmpeg: <http://www.ffmpeg.org/>
- HandBrake: <http://handbrake.fr/>
- Super: <http://www.erightssoft.com/SUPER.html>
- Cometdocs: <http://www.cometdocs.com/>
- Jaycut: <http://jaycut.com/>
- Format Factory: <http://www.formatoz.com/>

Free, on-demand cloud-based video encoding

- Zamzar: <http://www.zamzar.com/>
- Media-Convert: <http://media-convert.com/>
- Media Converter: <http://www.mediaconverter.org/>
- YouConvertIt: <http://www.youconvertit.com/OnlineVideo.aspx>
- MovAvi: <http://online.movavi.com/>
- OnlineVideoConverter: <http://onlinevideoconverter.com/>
- UEncode: <http://www.uencode.com/>

Audio (recording, editing, and sharing)

- Audacity Cross-Platform Sound Editor: <http://audacity.sourceforge.net/>
- Audacity manual: http://audacity.sourceforge.net/manual-1.2/index_splash.html
- LAME MP3 Encoder – Allows you to export Audacity files as MP3 files; available at: <http://audacity.sourceforge.net/help/faq?s=install&i=lame-mp3>)

Video captioning and subtitling applications

- Captioning Web: <http://www.captions.org/softlinks.cfm>

Additional free applications

For other information on free applications for playing, transcoding, posting, shipping, etc. visit my free applications page at: <http://exploringtech.wordpress.com/>



Ways to share large digital video files

Consider which method will work best for you:

- Share large files via free applications (see below)
- Use a File Transfer Protocol (FTP)
- Post files on media sharing sites, either publicly or privately (see below)
- Compress files and email them
- Share removable SD cards
- Copy files on flash drives, CDs, or DVDs

Free applications for sharing and storing files

- YouSendIt (claims to be HIPAA compliant): <http://www.yousendit.com/>
- FileDropper: <http://www.filedropper.com/>
- Rapidshare: <http://www.rapidshare.com/>
- SkyDrive: <http://skydrive.live.com/>
- divShare: <http://www.divshare.com/>
- OpenDrive: <https://www.opendrive.com/login.php>
- Wuala: <http://www.wuala.com/>
- Store & Share: <http://storeandshare.sky.com/base/login.jsp>
- Yuntaa: <http://www.yuntaa.com/>
- AdDrive: <http://www.adrive.com/>
- zSHARE: <http://www.zshare.net/>
- Orbitfiles: <http://www.orbitfiles.com/>
- icloud: <http://www.icloud.com/en/>
- 16 Apps That Make Sharing Large Files A Snap
<http://www.techcrunch.com/2009/08/08/16-apps-that-make-sharing-large-files-a-snap/>

Free places to post video

- YouTube: <http://www.youtube.com/>
- Screencast.com: <http://www.techsmith.com/screencast.asp>
- TeacherTube: <http://www.teachertube.com/>
- : <http://www.schooltube.com/>
- Ustream: <http://www.ustream.tv/>
- Vimeo: <http://www.vimeo.com/>

- Viddler: <http://www.viddler.com/>
- Open Source Movies: http://www.archive.org/details/opensource_movies
- MetaCafe: <http://www.metacafe.com/>
- Buzdeo: <http://www.buzdeo.com/>
- Bubbleshare: <http://www.bubbleshare.com/>
- Flickr: <http://www.flickr.com/>
- Picasa: <http://picasa.google.com/>
- Creative Cow: <http://www.creativecow.net/>
- Veoh: <http://www.veoh.com/>
- Lists and comparisons:
 - <http://chaos-laboratory.com/2007/08/30/top-31-free-alternatives-to-youtube-video-hosting-sites/>
 - <http://www.dvguru.com/2006/04/07/ten-video-sharing-services-compared/>
 - <http://www.squidoo.com/videohosting>

Accessibility and Section 508 of the Rehabilitation Act of 1973

Section 508 requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, Federal employees with disabilities have access to and use of information and data that is comparable to the access and use by Federal employees who are not individuals with disabilities, unless an undue burden would be imposed on the agency. Section 508 also requires that individuals with disabilities, who are members of the public seeking information or services from a Federal agency, have access to and use of information and data that is comparable to that provided to the public who are not individuals with disabilities, unless an undue burden would be imposed on the agency.

- Full text of Section 508 of the Rehabilitation Act of 1973:**
<http://www.section508.gov/index.cfm?&FuseAction=Content&ID=12>
- The W3C (The World Wide Web Consortium) outline of web accessibility:**
<http://www.w3.org/TR/WCAG20/>

Section 508 Standards for Video and multimedia products (§ 1194.24):

(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.

(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.

(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.



Video file formats

Source: FileInfo.com – The File Extensions Resource www.fileinfo.com

Although there are many wonderful resources on the web for learning about video file formats (try searching for video file formats or extensions), this is a particularly good resource. You can easily look up information on file extensions for all kinds of files, including text, data, image, audio, video, web, font, etc. Click on “Video Files” for descriptions of the various file formats, compatibility with PCs, Macs, and Linux, and programs that open files. Although the site covers more than 100 video formats, below are some of the most common.

- AVI** (Audio/Video Interleaved) is a file format for storing and playing back movie clips with sound on Windows-based PCs. Avi is a video container or wrapper format created by Microsoft; stores video data that may be encoded in a variety of codecs. AVI files can be played by various video players, but the player must support the codec used to encode the video data
- .FLV** (Flash Video File) is a video file exported by the Flash Video Exporter plug-in (included with Adobe Flash) or other program with FLV file support; consists of a short header, interleaved audio, video, and metadata packets; audio and video data is stored in a similar format used by standard Flash (.SWF) files. The FLV format is an open format that is also supported by non-Adobe/Macromedia programs; FLV files may be exported from QuickTime Pro or other applications that can export to the QuickTime file format. Macromedia was acquired by Adobe in 2005, so Macromedia Flash Player is now Adobe Flash Player.
- .MOV** (Apple QuickTime Movie) is a common multimedia format often used for saving movies and other video files; uses a proprietary compression algorithm developed by Apple Computer; compatible with both Macintosh and Windows platforms.
- .MP4** (MPEG-4) is a movie or video clip that uses MPEG-4 compression, a standard developed by the Moving Picture Experts Group (MPEG); commonly used for sharing video files on the Internet. The MPEG-4 video format uses separate compression for audio and video tracks; video is compressed with MPEG-4 video encoding; audio is compressed using AAC compression, the same type of audio compression used in .AAC files.
- .MPG** (MPEG Video File) is a common digital video format standardized by the Moving Picture Experts Group (MPEG); typically incorporates MPEG-1 or MPEG-2 audio and video compression; often used for creating movies that are distributed on the Internet.
- .SWF** (Small Web Format, pronounced "Swiff") is an animation created with Adobe Flash; may contain text as well as both vector and raster graphics; also may include interactive actions written in ActionScript; plays in Web browsers that have the Flash plug-in installed.
- .WMV** (Windows Media Video) is a video file based on the Microsoft Advanced Systems Format (ASF) container format and compressed with Windows Media compression; basically an .ASF file that is encoded using the Windows Media Video (WMV) codec; Windows Media audio files are saved with a .WMA extension. Microsoft Windows Media

Player 9 was the last version of the Windows Media Player developed for Mac OS X; however, Mac users can use Flip4Mac WMV (also known as Microsoft Windows Media Components for QuickTime) to play WMV files.



Video tape formats

Source: PCX Video Tape Buyer's Guide:

http://www.pcx.com.au/products/buyers_guide_video_tapes.asp

Although the PCX Video Tape Buyer's Guide lists many more tape formats, the ones listed are the ones that you are most likely to see or hear referenced.

Beta max	Beta max is a Sony development, whilst it competed head-to-head with VHS, VHS became the dominant domestic video tape format. Size: 155 x 95 x 24mm
VHS	Video Home Recording (VHS) these are what most people understand as a 'video tape'. Records analog video and audio - fairly poor quality by today's standards - about 240 lines. Size: 188 x 104 x 25mm
VHS-C	This format is a small VHS tape cassette designed to be used in video cameras - to play this tape in a normal VHS player you simply need a special VHS cassette device that holds the VHS tape for playing. Size: 95 x 60 x 25mm -
Super VHS (S-VHS)	Same size as VHS - this format was intended as a High Quality VHS (400 lines) Whist it had some popularity it was far from a dominant type. To play Super VHS you need a player that can play the normal AND Super VHS types.
Digital VHS (D-VHS)	Better than S-VHS is D-VHS, because it records digitally. Currently it is the only consumer device that can record or playback HD material
Video 8	This physical cassette is the same as High 8 and Digital 8. Differences in resolution of recordings and tape speeds apply. Size: 95 x 62 x 15
Hi 8	Hi8 (Pronounced High 8) can be up to 400 lines - giving quite a good analog picture. Size: 95 x 62 x 15
Digital 8	Digital8, a way of recording Digital Video on Hi8 tape (same quality as MiniDV). Hi-8 tapes used for Digital8 will yield 50% of the Hi 8 recording time. In other words, a 120 minute Hi8 will give you 60 minutes of Digital8 recording capacity. Size: 95 x 62 x 15
DV	DV (larger than MiniDV) makers: Panasonic and Sony - Typically this tape type is intended for consumer recording, whereas the DVCAM tapes are used in the professional level equipment. Size: 125 x 78 x 15mm
MiniDV	MiniDV: Also referred to as "Regular DV" "Consumer DV" or just "DV," MiniDV is the most common DV tape format. MiniDV provides the most universal playback compatibility. In the professional / broadcast industries, MiniDV tapes can be played in many DV devices (including <u>DVCAM</u> and <u>DVCPRO</u>) cameras and VTRs. MiniDV, DV, DVCAM and DVCPRO use the same tape width but their cassette sizes differ. Size: 66 x 48 x 12.2mm
HD DVC	HD DVC (MiniDV size) With the arrival of the HDR-FX1/E, Sony has developed a new Mini DV Cassette for HDV recording. Designed for 1080i or 720p HDV recording and playback. Size: 66 X 48 x 12.2mm
BetaCAM	The physical size of this cassette is the same as the original BetaMax. The format has gone through several generations as noted below. There is also a small cassette for shorter recording lengths: Small: 156 x 96 x 25mm (this is the same size as BetaMax) Large: 254 x 145 x 25mm (often referred to as "wide mouth")
DV Cam	DV Cam is somewhere between DV and DVCPRO with respect to video quality. The consumer version of this tape is DV



Other kinds of video to explore

Free video conferencing applications

- Skype: <http://www.skype.com/>
- Oovoo: <http://www.oovoo.com/>
- Google Video and Chat: <http://www.google.com/mail/help/videochat/learnmore.html>
- iChat (mac): <http://www.apple.com/macosx/what-is-macosx/ichat.html>
- AIM: <http://www.aim.com/>
- SightSpeed (Logitech): <http://www.sightspeed.com/>

Free video screen capture applications

- Screenr: <http://screenr.com/>
- CamStudio: <http://camstudio.org/>
- Screencast-o-matic: <http://www.screencast-o-matic.com/>
- Jing: <http://www.jingproject.com>
- oRipa Screen Recorder: <http://www.ejoystudio.com/oripa-screen-recorder/index.htm>
- Taksi: <http://www.menasoft.com/blog/?p=30>
- CaptureMe: <http://www.chimoosoft.com/products/captureme/>
- FastStone Capture: www.faststone.org/FSCaptureDetail.htm
- ScreenToaster: www.screentoaster.com/
- Auto Screen Recorder: www.wisdom-soft.com/products/autoscreenrecorder_free.htm
- Directory of Screen Capture, Screencasting and Software Demo Tools: <http://c4lpt.co.uk/Directory/Tools/capture.html>

Simple way to download YouTube videos (works with most, but not all, videos)

- Navigate to the video you want to download
- Type the letters “pwn” before the word “youtube” in the URL. For example: <http://www.youtube.com/watch?v=YGhhETB9RNq> becomes <http://www.pwnyoutube.com/watch?v=YGhhETB9RNq>
- Hit enter on your keyboard. This takes you to <http://deturl.com>
- Select “Download High Quality Video (MP4)”



Resources to help you keep up with digital video

Creative Cow: http://newsletters.creativecow.net/
Studio Monthly: http://www.ameda.com/stu/
Studiobdaily.com e-newsletter: http://www.studiobdaily.com/main/eletter_subscribe.html
HD Studio: http://www.studiobdaily.com/hdstudio/signup.html
Videatives Views: https://www.videatives.com/content-new/videatives/videatives_views/index.php
Video Technology Magazine: http://www.videotechnology.com/
Learn about the Flash video (FLV) format. http://www.adobe.com/devnet/video/
Flash video learning guide: http://www.adobe.com/devnet/flash/articles/video_guide.html



A few fun video-related resources

- Yoostar:** With Yoostar, you can do more than just sit and watch your favorite movies, TV shows and other video. You can star in them alongside your favorite actors, play the role however you want, and share your performance with the world:
<http://www.yoostar.com/index.html>
- How to share a link to a specific timecode in YouTube video:**
<http://www.businesscasualblog.com/2009/07/how-to-share-a-link-to-a-specific-timecode-in-youtube-video.html>
- Digital storytelling resources:**
 - o 50+ Web 2.0 Ways To Tell a Story: <http://coqdogroo.wikispaces.com/50+Ways>
 - o Digital Storytelling in the Curriculum:
<http://web.mac.com/digistoryteller/DigitalStorytelling/Home.html>
- Avatars:**
 - o Voki: <http://www.voki.com>
 - o Xtranormal: <http://www.xtranormal.com/>