

CREATING VIDEOS AT HOME: FROM SCRIPTING TO THE FINAL CUT

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Why Use Video to Teach?

Video modelling is a well-established tool that many parents, teachers and other caregivers have used to help children with ASD learn. Video modelling is a preferred learning modality for individuals with strong visual processing, which includes a majority of people with ASD. Making videos gives family and/or educational team members a chance to practice playing, have some fun, and interact with one another in a positive way.

Video also has some unique advantages when compared to “live” instruction. On video, a child can view consistent samples of complex interactions and events. In other words, videos are less variable than we can hope to be when repeatedly modelling or when more than one person acts as a model. Viewing videos gives children many opportunities to rehearse in private before trying out new skills with peers or in less familiar surroundings. Using close ups and camera angles, we can also highlight critical environmental features and contingencies that a child might miss when looking at a more complex situation.

There are some commercially available, pre-made videos intended for children with ASD, and we’ve included a short list of links to these products at the end of this chapter. It’s been our experience that custom-made videos aimed at particular children can be most effective. We are amazed and excited about the wide variety of topics, approaches and content that parents choose for their own children. Many report that they really enjoyed the experience and that it helped them think of learning from their child’s perspective.

TIPS FOR MAKING EFFECTIVE VIDEOS

- Show positive outcomes in the video. (The actor playing the child’s role should receive rewards or access to preferred activities.)
- Start with actions and interactions already in the child’s repertoire.
- Limit verbal demands in initial videos.
- Guide action with a gentle “teaching touch.”
- Choose a highly preferred model, or one the child has followed or imitated in the past.
- Avoid talking when the video is taping, except when required by your role (if any) in the video.

IS YOUR CHILD READY TO TRY VIDEO MODELLING?

In our practice, we have used video modelling with children as young as three. In order to begin, children should have mastered at least one-step imitation with an object. They should be able to attend from a distance, and have an interest in videos, television or computers.

A WORD OF CAUTION

It has been well-documented that children under two years of age should not watch any television, and many psychologists and pediatricians recommend that children should not watch at all until they are three. Early viewing has been linked to delays in learning language and in the development of social, emotional and cognitive skills. (Thakkar, 2006) It has also been shown to increase the risk of attention problems in later life. (Johnson, 2007)

Extensive screen time (in excess of 2 hours a day watching TV, playing video games, or using the computer) is not recommended for typically developing children of any age, and has been linked to problems with violence and aggression, body concept, nutrition, obesity and substance abuse. (Committee on Public Education, 2001) For individuals with ASD, this situation is further complicated by the risk of increased stereotypic behaviour, such as repeated rewinding and viewing very small segments of preferred movies or games. As a general rule, we don't recommend allowing children with ASD unmonitored access to screen time.

Limiting access to videos and TV may also increase the effectiveness of video teaching by increasing the value of screen time. Remember, we are teaching children to imitate what they see on the screen. For that reason, children should not view violent video games, movies, TV, or cartoons. (Bandura, 1961)

WHAT KIND OF VIDEO?

Videos can help children learn many skills, including independent and interactive play, beginning speech, and conversation. Base your choices on your child's interests and personality.

Some goals to consider:

- Improving joint attention and imitation – use nonverbal play videos with objects and movement.
- Supporting emerging speech – make videos with speech sounds, animal sounds, short words and phrases embedded in play sequences or songs.
- Developing imaginative play skills – model independent or interactive pretend play sequences.

Preparing for life events & changes – show what it will be like on holidays, at doctor and dentist visits, in new schools, on vacations, or in new social situations.

It's a good idea to include items that your child enjoys in the video. Props can help children pretend while they give opportunities to practice using toys and other materials in new, more functional ways. Some good choices are objects with cause and effect features, costumes, and actual items from the child's environment, such as cooking tools. It's also helpful if the materials lend themselves to the creation of a sequential narrative and are easy to generalize to other toys, people, and

settings.

SCRIPTING

Once you've chosen your basic subject matter and props, you are ready to write the script. Scripts should be tailored to the individual child in content, length, and language. It is important to have some kind of narrative thread. This could be the demonstration of a sequence (such as getting dressed for school in the morning), the telling of a simple story by setting up a problem and then resolving it, or the modelling of a process (such as preparing a particular dish). If your video includes non-child roles (adults or peers), use them to model more complex language or actions.

CASTING

As mentioned above, your video will be more effective if the person on the video the child is intended to copy is someone whom he likes and/or has copied in the past. This person can be a parent, sibling, peer, teacher, or cartoon character (represented by a doll or puppet).

THE SHOT LIST

Before you begin shooting, you will need to make a shot list. This is a list of everything you are going to record with your camera. Work from the written script to make your list. Think about what actions, toys, and/or body parts you want to draw the child's attention to. Wide shots work best when it is important for the child to see the entire body, or when there are a lot of people in the scene. Medium shots are good for recording talking and facial expressions. Close-ups can help children see hands, fingers, lips, writing, drawing, or other close work.

EQUIPMENT

The only two things you must have to make a video are a camera and some sort of media (something to record onto). People use a variety of cameras –ranging from VHS, compact VHS, and a variety of Digital Video cameras that record on mini DV tapes, hard drives, memory cards, or mini DVDs. All of these cameras are capable of taping effective videos. If you want to transfer your footage onto a computer for editing, this is most easily done using a Digital Video camera. Inexpensive cameras range in price from about \$20 for a used VHS

camera (often found at garage sales and thrift stores) to \$200 for a new mini-DV camera.

Other optional equipment includes tripods, microphones, and lights. Using a tripod can help make the picture steadier, but a stack of books or similar objects or your own locked forearm will also do. An external microphone can cut down on camera noise and echoes. Extra light will help make your picture clearer.

THE SET

You also need to decide where to shoot. The set should be quiet, simple and free of visual clutter. Remove anything in the background that could distract the child when she views the video. When possible shoot the video in a natural setting, such as the kitchen for a cooking video. The location, or one very similar to it, should be available for the child to use when viewing and copying the video.

LIGHTING

Treat lighting a video shot as if you are taking a still photo. Avoid shooting into a light or window; locate the light source above or behind you. The better the light, the clearer your picture will be. The most important thing is that the viewer can see what you are asking him to imitate. Most consumer cameras sold over the past 15 years have an "Auto" setting. This means that the camera will perform most functions for you, such as focusing the lens and adjusting the aperture to let in the right amount of light. You can help the "Auto" functions perform well by avoiding shooting directly into a light source, framing people tightly (don't leave a lot of room above your subject's head or below their feet), and watching out for shadows.

COSTUMES

Our goal is to get the child to watch people, actions, and expressions and listen to verbal communication. For that reason, actors should avoid wearing plaids, stripes, or checks and stay away from distracting jewelry, buttons, and pins. The color of clothing should contrast with the background so that it is easy to make out the positions of the actors' bodies. Set up contrasts for feet, face, and hands as needed.

ACTING

It is most effective to speak more clearly and slowly than feels natural, and to leave long pauses between chunks of action and/or language. This allows time for children to process what they hear and respond. You should also use clear, slightly exaggerated facial expressions and gestures. As always, tailor what you do to meet the specific needs of the child you are teaching.

OTHER USEFUL ELEMENTS

You will probably find it useful to write what you are planning to say and do on cue cards. Even with rehearsals, people often forget their lines. Position the cards near the camera, so that actors appear to be looking in the camera when reading them. Making movies is a group activity; in the case of a Hollywood film, making a single movie can sometimes take the contribution of literally thousands of people. Have team or family members act as production assistants by holding cue cards, handling props, or keeping track of the shot list. It makes shooting easier and usually results in a better-finished product.

STEPS FOR SHOOTING

- Allow the camera to run for a few sections before the "action" begins. Establish a nonverbal cue to get things started. Remember, all the sounds in the environment will be recorded by the camera.
- If you are planning to edit your footage after you shoot, shoot the entire script from beginning to end using an establishing shot. This is usually your widest-angle shot.
- Use medium shots to show people talking.
- Use wide shots to capture large movements.
- If you are not planning to edit after you shoot, shoot the shots in the order you want the child to see them. Press the pause button between shots. Set up the next shot and then release the pause. Do not use the stop button.
- Use your shot list to make sure you get all of the close ups and medium shots you need.

COMPUTER EDITING

Editing your movie with a computer adds an extra step to the video making process. The advantage you get is that you can shoot faster, cut out unintended errors, and add music and special effects.

Video editing steps:

- Import the movie to computer.
- Select and arrange your clips.
- Add music, titles, and special effects.
- Export your finished movie to tape or DVD.

Hardware & Software for video editing:

- Computer with a Firewire port and a DVD burner
- Macintosh
- iMac, G4, G5, MacPro or MacBook
- iMovie or Final Cut
- PC
- XP Professional or higher compatible desktop or laptop (Minimum Pentium IV 3 GHz recommended)
- Moviemaker or Adobe Premier

BASIC TEACHING PROCEDURE

- Encourage independence by allowing the child to gather and set up the materials.
- Remain silent, except when modelling verbalizations (if needed).
- On first presentation, show the child the video in its entirety.
- For an early learner, start by showing the first 3 to 6 steps.
- If imitation occurs immediately, continue rolling.
- If it doesn't;
 - Briefly pause the video;
 - Gently guide actions from behind;
 - Use a (soft) verbal or textual cue to facilitate speech.

- Stop helping as quickly as possible.
- As soon as a sequence is mastered, try it without the tape; also, try playing in other settings and with other people.
- When a sequence has generalized, move on to the next sequence.
- When an entire video has been learned, introduce variety in sequence, materials, and perspective.

Make it FUN!

- Find ways to encourage children and let them know they are on the right track.
- Resume playing the paused video as soon as imitation occurs. The desire to move to the next sequence can be very motivating.
- Put an enjoyable segment at the beginning and the end of the video.

VIDEO MODELLING RESOURCES

Articles & Books

- Bandura, A., Ross, D. & Ross, S.A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63, 575-582.
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- Johnson, J.G., Cohen, P., Kasen, S., Brook, J.S. Extensive television viewing and the development of attention and learning difficulties during adolescence. *Arch Pediatric Adolescent Medicine*. 2007; 161(5): 480-486.
- Krantz, P.J., MacDuff, G.S., Wadstrom, O., McClannahan, L.E. (1991). Using video with developmentally disabled learners. In P.W. Dowrick, *Practical Guide to Using Video in the Behavioral Sciences* (pp. 256-266). Oxford, England: John Wiley & Sons.

LeBlanc, L.A., Coates, A.M, Daneshvar, S., Charlop-Christy, M.H., Morris, C. & Lancaster, B.M. (2003). Using video modelling and reinforcement to teach perspective-taking skills to children with autism. *Journal of Applied Behavior Analysis*. 36, 253-257.

Neuman, Lisa. *Video Modelling: A Visual Teaching Method for Children with Autism*. Willerik Publishing. <http://ideasaboutautism.com/video.html>

Sherer, M., Pierce, K.L., Paredes, S., Kisacky, K.L., Ingersoll, B. & Shreibman, L. (2001). Enhancing conversation skills in children with autism via video technology. Which is better, “self” or “other” as a model? *Behavior Modification*, 25, 140-158.

Taylor, B.A., Levin, L. & Jasper, S. (1999). Increasing play-related statements in children with autism toward their siblings: effects of video modelling. *Journal of Developmental and Physical Disabilities*, 11, 253-264.

Thakkar, R.R., Garrison, M.M. & Christakis, D.A. A systematic review for the effects of television viewing by infants and preschoolers. *Pediatrics*. 2006; 118(5): 2025-2031.

Pre-Made Videos

Fitting in and Having Fun: <http://diffelearn.com/prodinfo.asp?number=DRV%20108>

Model Me Kids: <http://modelmekids.com>

Watch Me Learn: <http://www.watchmelearn.com>

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