Creating & Using Video Models with Individuals on the Autism Spectrum

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Monarch Center for Autism

Programs & Services

- Preschool & Day School
- Transitional Education Program
- Boarding Academy
- Adult Autism Program & Residence
- Extended School Year
- Summer Social Language Program
- Family Training, Support & Social Activities
- Online Resource Center

Agenda

- Definition of Video Modeling
- Benefits of Video Modeling
- 4 types of Video Modeling Strategies
- Recommended Apps and Tools
- 10 Steps for Implementing Video Models

What is Video Modeling?

Video Modeling is a mode of teaching that uses video recordings or live video (observational learning videos) to provide a visual model of instructions on how to carry out a behavior or skill.

Video Modeling

- This practice meets evidence-based practice (EBP) criteria* and may be useful anywhere a student has access to video display equipment.
- Efficient and cost-effective

  -Create once, replay as many times as needed

  -Consistency is built-in

*Bellini & Akullian, 2007

Why do Students with Autism benefit from this Mode of Teaching?

Research indicates that individuals with Autism Spectrum Disorders*:

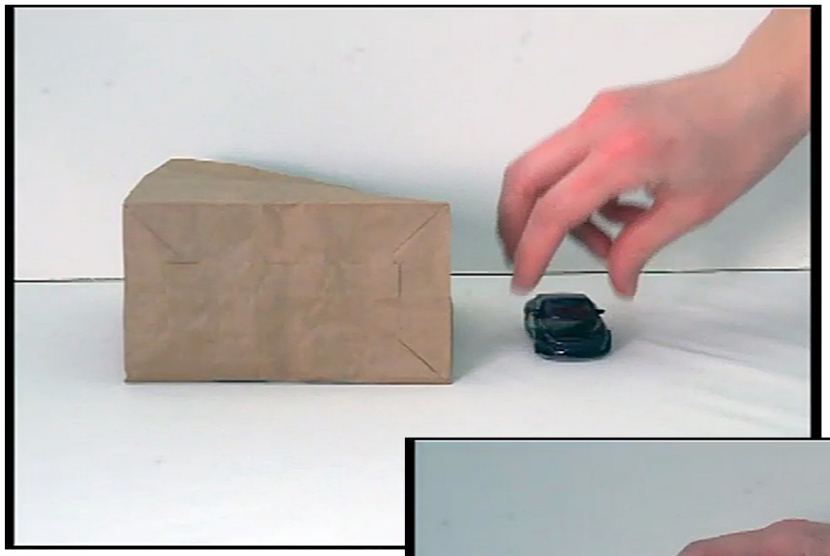
- Typically use visual processing as their dominant information processing mode.
- Demonstrate a specific attraction to visually oriented materials including computer programs, tablets, object categorizations and other activities that rely on visual-spatial and constructional capacities.
- Benefit from the use of visual content to enhance communication, help organize daily experiences and improve school performance.

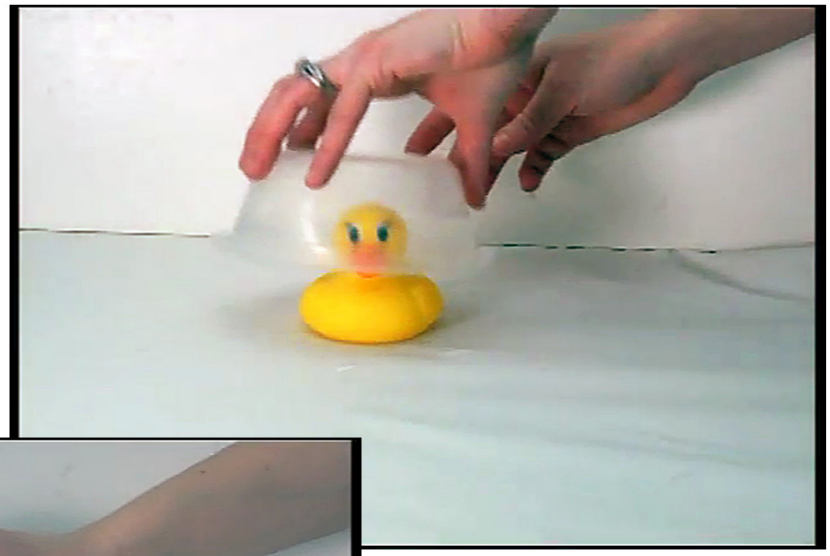
* Shane, H.C., Weiss-Kapp S. (2007); Cafiero, J.M. (2001); Grandin T. (1995); Althaus, M., de Sonneville, L.M., Minderaa, R.B., Hensen, L.G., and Til, R.B. (1996)

Preposition Action Concept Evaluation (PACE):

- Developed and Piloted at Monarch School with 10 students in 2014.
- PACE evaluates which modality students most effectively understanding directives that contain a preposition (e.g. “put the block under the box”); verbal directions, static scene cues, or dynamic scene cues (video models).

Samples of the scene and static cues used in the assessment:





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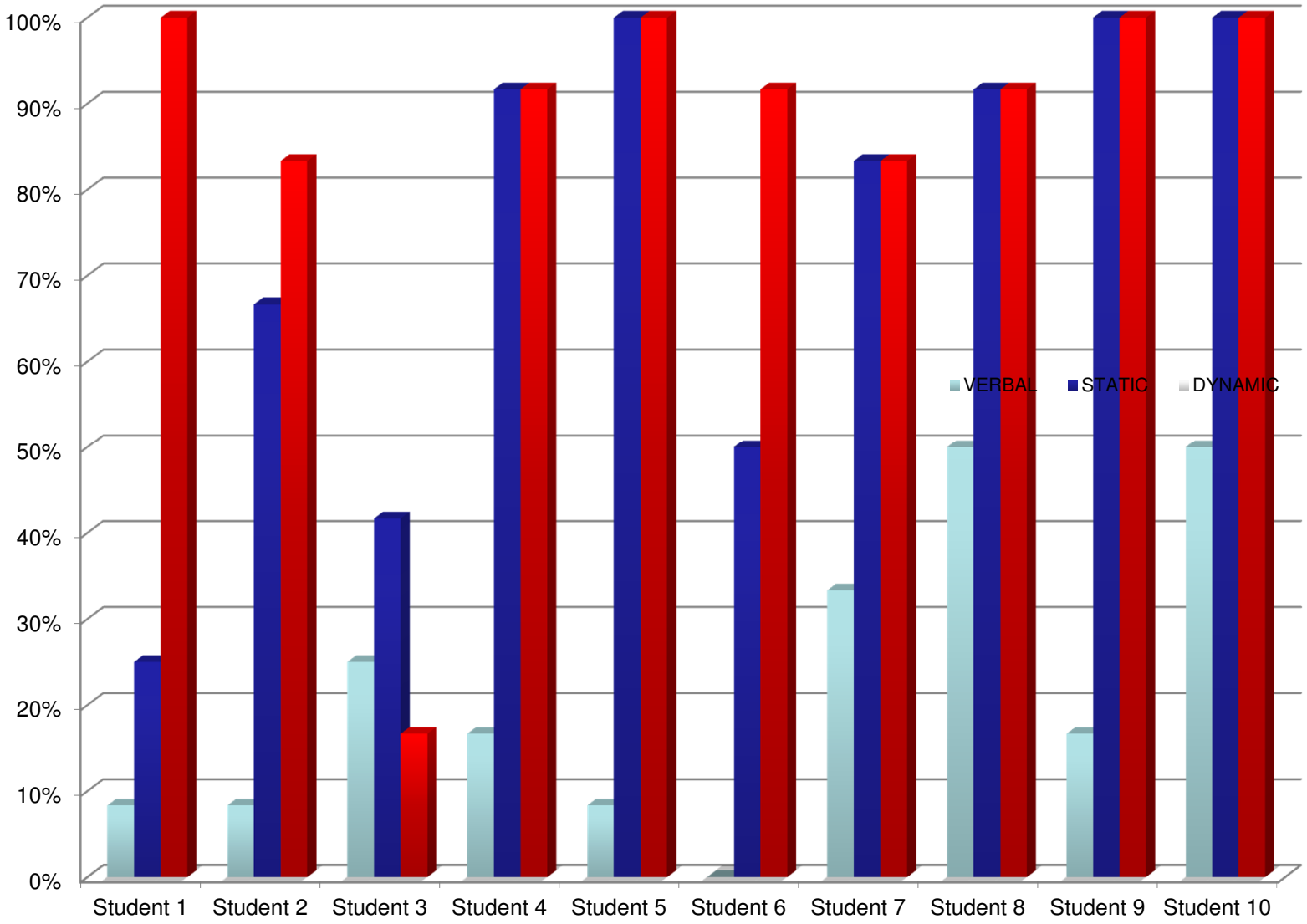
Light Blue=verbal
Dark Blue=Static
Red=dynamic

Findings



Student Participating in PACE

What does this mean in the *classroom*?

Students…

- Respond to nouns
- Respond to gestures and/or eye gaze
- Recognize intonation
- Recognize routines/patterns

What are the 4 Types of Video Modeling Strategies?

1.Basic Video Modeling:

- A video recorded of *someone other than the learner* engaging in the target behavior or skill (i.e., models). The video is then viewed by the learner.

2.Self -Modeling:

- A video recorder of the *learner* engaging in the target behavior or skill. The video is then viewed by the learner.

3.Point of View Modeling:

- The target behavior or skill is recorded from the *point of view* of the learner.

4.Video Prompting:

- Involves breaking the target behavior or skill into steps and recording each step. Each step is recorded with pauses built in during which the learner may attempt the step before viewing the following steps. Either the learner or someone else can act as the model.

What are some recommended Apps and Tools used to create Video Models?

Autismate

- A scene cue based AAC app
- Create Scenes from the stock library or take your own pictures. You can the create hotspots with quizzes to help describe the scene or things going on in the scene.
- The student can then use the built in AAC app to communicate about items in the scene.
- GPS functional to activate scenes based on location.
- Also create visual schedules to go with the scene.
- “Hot spots” can house video models related to the environment or activity depicted.
- Great content sharing abilities via email or through iTunes.
- Ability to backup changes.

Price: $149

iPad Only

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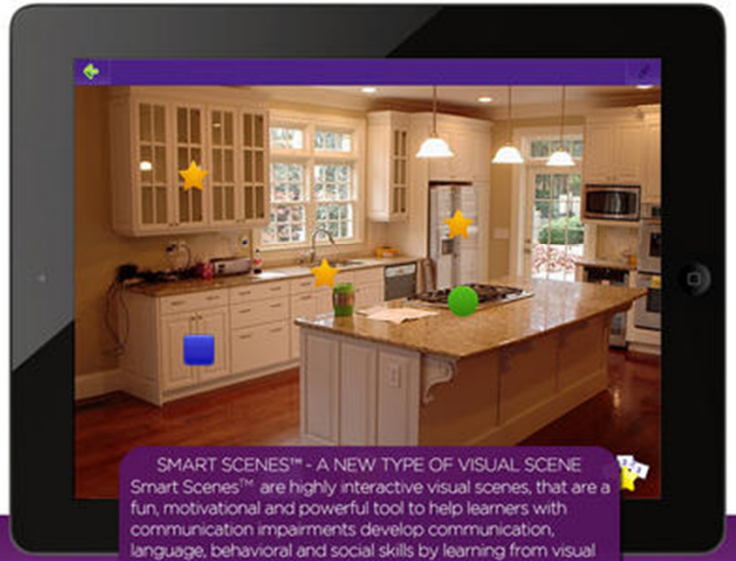
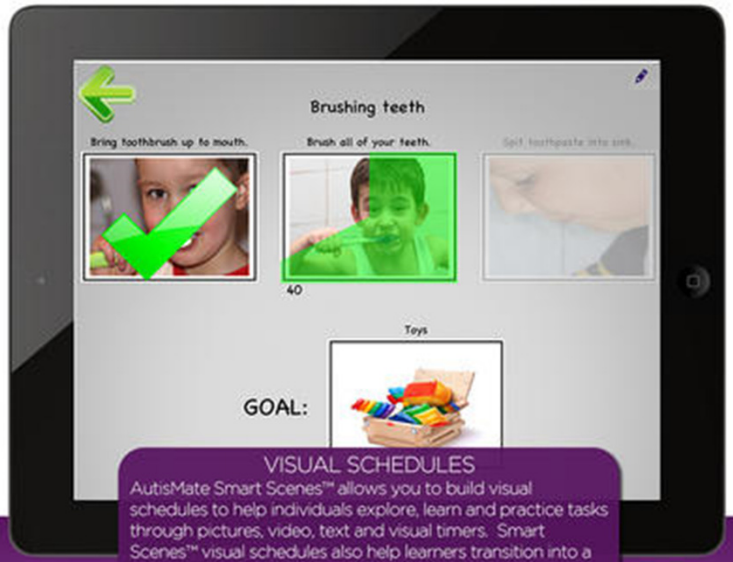


SMART SCENES™ - A NEW TYPE OF VISUAL SCENE

Smart Scenes™ are highly interactive visual scenes, that are a fun, motivational and powerful tool to help learners with communication impairments develop communication, language, behavioral and social skills by learning from visual scenes, visual stories, visual schedules and video modeling.

VIDEO MODELING

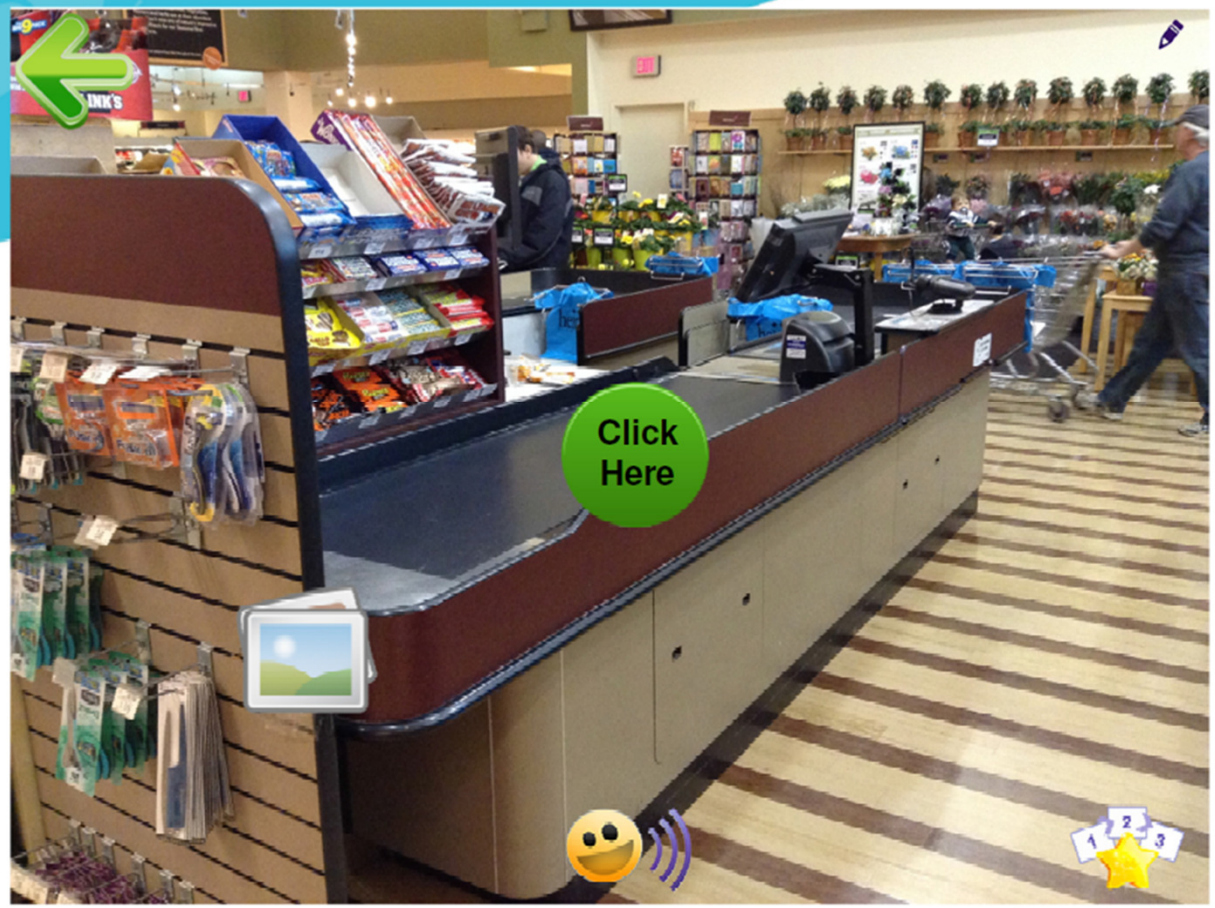
AutisMate Smart Scenes™ use video modeling, a research-based tool, that teaches socialization and behavioral skills. Personalize Smart Scenes™ video modeling for the learner making it easier to learn by watching and imitating videos of their actual environment and experiences.



VISUAL SCHEDULES

AutisMate Smart Scenes™ allows you to build visual schedules to help individuals explore, learn and practice tasks through pictures, video, text and visual timers. Smart Scenes™ visual schedules also help learners transition into a new environment or teach appropriate behavior.

Visual Scene Display – Visiting the Grocery Store



Visual Scene Display – Requesting Activities in the Bedroom

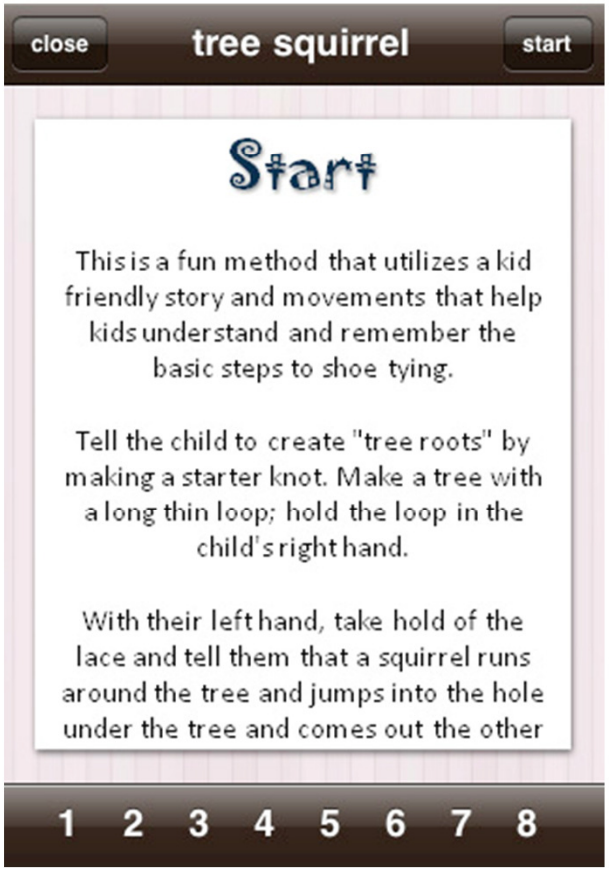
Magic Shoes

- By New Bricklyn
- Step by step instruction on tying shoes.
- Bunny ears and tree squirrel lacing methods
- Easy to follow video instruction
- Photo capture or selection and email sharing

Price: $1.99

iPod Touch
iPad 2x


close
tie laces
bunny ears
tree squirrel
videos


close
tree squirrel
start
Start
This is a fun method that utilizes a kid friendly story and movements that help kids understand and remember the basic steps to shoe tying.
Tell the child to create "tree roots" by making a starter knot. Make a tree with a long thin loop; hold the loop in the child's right hand.
With their left hand, take hold of the lace and tell them that a squirrel runs around the tree and jumps into the hole under the tree and comes out the other
1 2 3 4 5 6 7 8


boy
girl
Magic
touch here
Shoes
tie laces
share

PuppetPal HD

- Create custom scene cues.
- Default characters & scenes or you can add your own.
- Record your own voice.
- Record your scene for playback.

Price: Free

+ universal


back


foreground
Choose up to 8 Actors
My Content
Edit
Add Actor from Photo
Entertainers
next
background
selected


PUPPET PALS
Saved Shows
More Characters
Press to Start

Puppet Pals 2: All Access

- Sequel to Puppet Pals 1 allows you to create scenes and place the student into the scene using their image.
- You can record your own voice as a narration.
- New built in characters and backgrounds, use your own backgrounds to engage the students.
- Can also be used for social story play to help students discuss events in a therapeutic way.

Price: $4.99

+ universal


Play
Magic Movie
PUPPET PALS


Create Cartoons
Starring You!


Imaginative Play
Creative learning and Problem Solving.

Model Me

- Model Me Going Places 1 & 2
- By Model Me Kids, LLC Video modeling for students with autism.
- Appropriate behavioral skills when going places.
- Audio Narration for slides with text to support.
- Built in locations include Hairdresser, Mall, Doctor, Playground, Grocery Store, and a Restaurant

Price: Free
+ Universal

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VizZle

- VizZle just added a new template type to their software at the end of April –
- Topic Board
- It allows teachers to create open-ended communication experiences for students and is a great tool for visual learners.
- Embed video models in order to teach language concepts

What are Tips for Creating Video Models?

Creation Tips:

- Begin with a simple skill to promote success
- Capture the visual demonstration without the use of verbal language
- Keep the demonstrations short
- Create variations to promote generalization
- Limit Visual Distractions
- Limit Auditory Distractions
- Make visual cues
- Pick the best model for your child

How do I Implement Video Models?

Ten Steps for Implementing Video Models with learners on the Autism Spectrum:

1. **Identify a target behavior or skill that is important for the learner to acquire.**
   - Define and describe the target so that it is observable and measurable

Example of an observable and measurable behavior*: Katie will play with 3 new toys using their appropriate function in the designated play area.*

Example of a non-measurable behavior*: Katie will increase her play skills.*

2. Acquire the Equipment Needed

- There are two basic pieces of equipment needed to implement video modeling techniques: (a) video recording device such as a hand-held camera or tablet (b) equipment to play back the video such as a tablet or computer.

3. Create a script or task analysis detailing the skill that needs to be taught

- A **script** tells what needs to be said.

  -Script Example: Initiating interactions with peers by saying, 'Hi. How are you?'

- The **task analysis** breaks down a skill into steps needed to complete the target behavior.

  -Task Analysis Example: All the steps of learning how to do the laundry.

4. Collect Baseline Data

- Videos used for teaching should be determined by baseline data. It's important to identify skills or parts of skills the learner already has.

  -Example: If the learner knows the first three steps of making a bed, it is only necessary to teach the remaining steps.

5. Making the Video

- Identify the video modeling strategy that is best for the learner (basic video modeling, video self-monitoring, point-of-view modeling, video prompting) as well as the target behavior.
- Record the teaching steps and edit out any errors or distractors.
- Ensure the materials used for the video and the instruction are the same.

6. Arrange the Environment for Watching the Video

- How often and when will the video be shown?
- Where will the teaching take place?

-Example: The video of the target skill, such as preparing a snack, is shown in the kitchen right before the learner practices the skill.

7. Show the Video

- Allow the learner to view the video as many times as needed for the skill to be performed.
- Play the video in a loop if necessary.
- Prompt the learner to attend to the video if needed.
- For Video Prompting, remember to stop the video after each step so the skill/behavior can be performed.

8.Monitor Progress

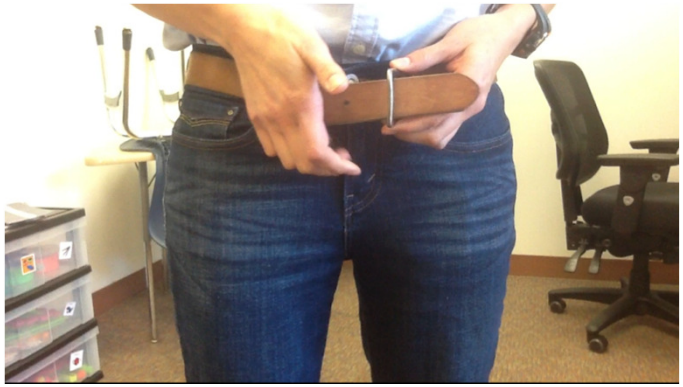
- Collect data on the learner's performance of the target skill and the steps completed independently.
- Instruction is continued until the learner has met criteria for the objective.
- Note how often the learner references the video and when.
- If after 3-5 viewings the learner is not making progress, begin trouble shooting.

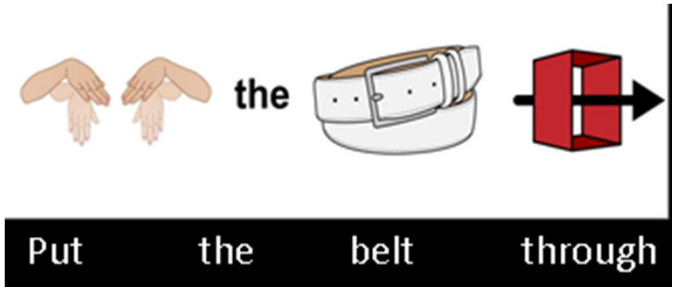
9. Troubleshoot

- Is the learner watching the video enough times?
- Is the learner watching, but not attending to relevant parts?
- Does the prompting level need to be adjusted?
- Does the frequency or type of reinforcement need to be adjusted?
- Is the video too complex? Does the learner have the skills needed?
- Does the skill need to be broken down into smaller steps?

10. Fading the Video and Prompting

- Once the learner shows progress or is able to demonstrate the target behavior consistently, fade prompts.
  - -Example: Gradually decrease the amount of video the learner views.
  - -Example: error correction strategies. This procedure is used if the learner continues to make mistakes; let the learner re-watch until the action can be performed correctly.
  - -Example: Gradually remove scenes or parts of the task from the video.

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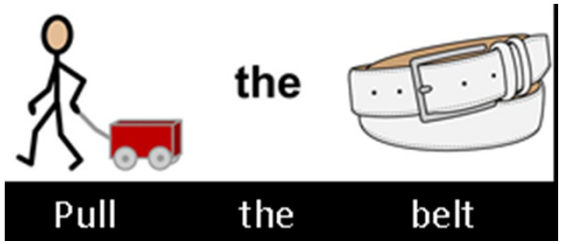
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Take Aways

- Consider Video Modeling as an evidence based method of teaching for your students.
- Brainstorm ways to make videos individualized and motivating for each student.
- Remember to always model the skill you want the student to emulate.
- Teaching the language will help to fade the video model and generalize the skill.

Questions

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