Welcome to Special Learning's Webcast Training Series
August 30, 2012

Topic: Video Modeling and Video Prompting as a Treatment Intervention

Speaker: Michele LaMarche, BCBA

Special Learning

Professional Training Series

Video Modeling and Video Prompting as a Treatment Intervention

Presented by: Michele LaMarche, BCBA

Step by Step

Special Learning

Speaker Bio

Michele LaMarche is a BCBA and co-founder of Special Learning, Inc. She is also the founder and Executive Director of Step By Step Academy (SBSA), a highly-regarded center-based non profit Autism treatment facility in Columbus, Ohio. Since its formation almost ten years ago, SBSA has touched the lives of over one thousand students through rigorous application of Applied Behavior Analysis (ABA) treatments, resulting in exceptional outcomes.

Michele, with over fifteen years of professional experience in the field of ABA, uses her knowledge of behavioral treatment to produce ground breaking, effective, empirically validated curricula, a critical factor in successfully mainstreaming hundreds of students with ASD. With her credentials and work through Special Learning and SBSA, she has changed the lives of countless individuals and families affected by ASD.

Objectives

- Upon completion of ***Video Modeling and Video Prompting as a treatment intervention***, participants will be able to:

1. Describe what it means to prompt with a model.
2. List various types of video prompting methods and identify their similarities and differences.
3. Discuss skills that may benefit from using this intervention and supporting research.
4. Summarize ways in which video modeling and video prompting interventions have been used as a treatment intervention.

Begin Code: ml21012s

What is a Model Prompt?

(Cooper, Heron, Heward)

- Definitions:
  - Model – anything that provides an example of behavior to imitate, follow
  - Prompt – a type of assistance that is delivered to someone to complete a skill, task, etc.

- Delivered prior to the targeted behavior – referred to as antecedent stimuli
- A type of response prompt that provides the learner with a visual of what the target behavior should look like

- This presentation will focus on the use of video models as a treatment intervention for individuals with autism and other developmental disabilities

What is a Model Prompt?

(Cooper, Heron, Heward)

- Model prompts can take many different forms
  - In vivo – via a peer, instructor, etc.
  - Video models – via computer, portable device, etc
  - No matter the type of prompt, each assists in teaching the learner new skills, behaviors

- Ensure the learner has the prerequisite skills necessary to benefit from model prompts...

Some Points to Consider...

(Cooper, Heron, Heward)

- Skills required include:
  - Ability to attend to model – Can the individual view the model for the duration of time it is presented?
  - Ability to imitate – can the individual do what you do? If unable to imitate instructor, will not have skills necessary to imitate prompts provided via videos
  - May or may not have mastered component behaviors – steps involved in a particular task do not have to be mastered, however the individual should have the ability to complete them without additional training outside of the model prompt

Prompting with Video Models

http://autismpdc.fpg.unc.edu/content/video-modeling

- Types of video models include:
  - Basic video modeling
  - Video self-modeling
  - Point-of-view video modeling
  - Video prompting
- Video models are based off Albert Bandura's social learning theory – people learn through observation

- Video modeling is an evidence-based prompting strategy that has been shown to increase a variety of behaviors in individuals with autism, pervasive developmental disabilities, intellectual disabilities, traumatic brain injury, etc.

- The following slides discuss what each type of video model entails

Basic Video Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

- Someone other than the learner is filmed, engaging in the target behavior
- Can include:
  - Instructor
  - Peer
  - Parent
  - novel person
- The video is shown in it's entirety to the learner who will then practice the skill after viewing it
- Can be any length of time – the video must show the skill in it's entirety

Basic Video Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

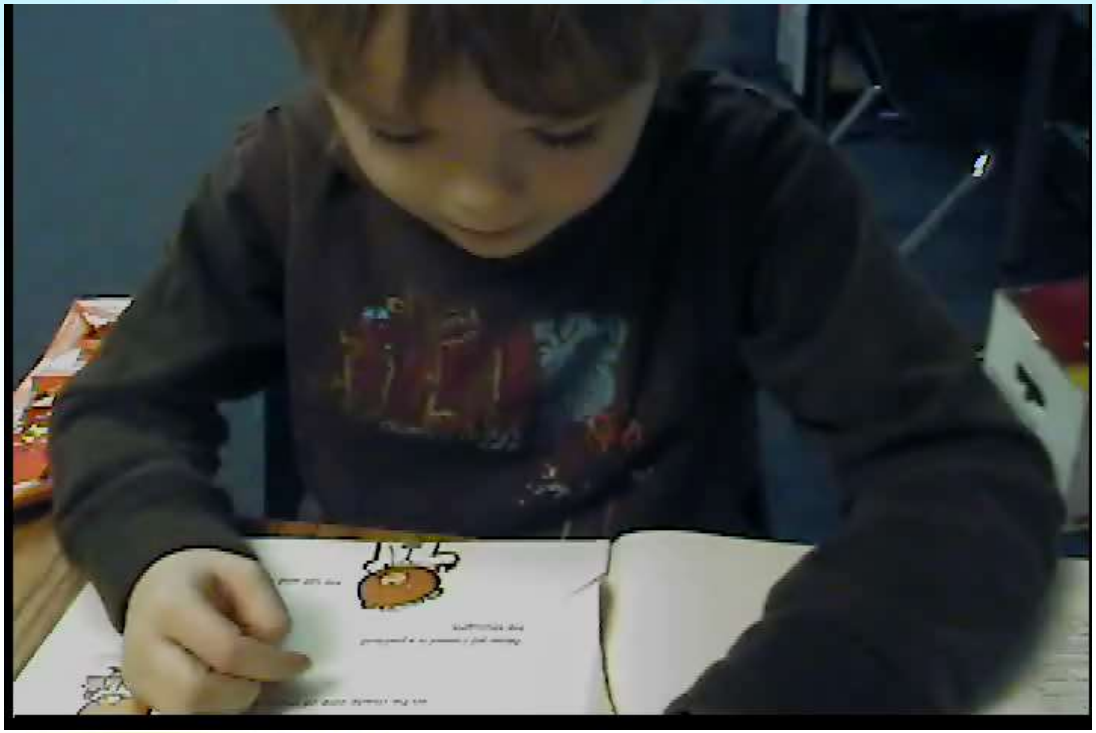
- Can be viewed using any device that will enable the learner to perform the task immediately following the video
  - Computer
  - Portable device such as an iPad or iTouch
  - TV
- Upon completion of the video, the learner demonstrates the target behavior that was shown in the video
- Additional interventions may be required for the individual to perform the skill
  - The instructor may provide guidance to the individual to complete the task after viewing the video
  - Reinforcement should be delivered once task is completed in order to increase skill acquisition

Video Self Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

- The learner is filmed while engaged in the target behavior to increase
  - They will require prompting to engage in the target behavior

- Once filmed, the prompter is removed from the film footage and the learner views only himself or herself performing the target behavior
  - Because the prompter must be removed from the video, this is considered the most time consuming, of all the model,s to create
  - The learner views the video in it's entirety prior to practicing the skill



Step by Step
www.stepbystepacademy.org

Special Learning
www.special-learning.com

Video Self Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

- The learner is filmed while engaged in the target behavior to increase
  - They will require prompting to engage in the target behavior

- Once filmed, the prompter is removed from the film footage and the learner views only himself or herself performing the target behavior
  - Because the prompter must be removed from the video, this is considered the most time consuming, of all the model,s to create
  - The learner views the video in it's entirety prior to practicing the skill

Video Self Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

- Upon completion of the video, the learner immediately practices the target behavior
  - Prompting may be required to assist in task completion, and reinforcement provided following behavior

- Video self modeling can also be used to decrease maladaptive behaviors
  - Individuals may be filmed while engaging in target behaviors such as self-stimulatory behaviors (hand flapping, body rocking, etc.), non-compliance, or aggression
  - Allows the viewer to identify and become more aware of their behaviors and their social significance

Point-of-View Video Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

- The video is taken from the perspective of the learner
  - Provides the learner with the same perspective as they have when actually practicing and performing the skill
- Since the video model is focused on the steps of the task, anyone may be filmed completing the task
- The learner then views the video in it's entirety using a computer, mobile device, TV, etc
- Upon completion of the video, the learner immediately practices the target behavior
  - The learner may require additional assistance to complete the behavior and reinforcement must be provided once behavior is completed

Video Prompting

http://autismpdc.fpg.unc.edu/content/video-modeling

- A type of model prompt

- Can take different forms:
  - Can be filmed in the point-of-view of the learner
  - An individual other than the learner may be filmed while engaged in the target behavior
  - The learner may be filmed while engaged in the target behavior

Video Prompting

http://autismpdc.fpg.unc.edu/content/video-modeling

- Target behaviors are broken down into a variety of different teaching segments
  - After viewing each segment, the learner is immediately provided the opportunity to demonstrate the specific step he or she just viewed
  - Upon completion of each step, the learner then views the next step within the chain and continues until the entire behavior is completed

- The learner may require assistance to complete the skill and reinforcement should be provided following the behavior

Video Prompting

- Example of video prompting to teach a daily living skill: blow nose
  - Behavior chain may look like this:
    - Get tissue
    - Put tissue to nose
    - Blow nose
    - Wipe clean
    - Throw away
  - Using a video prompt to model the behavior of blowing nose will look like this:
    - Get tissue – pause, individual completes step
    - Put tissue to nose – pause, individual completes step
    - Blow nose – pause, individual completes step
    - Wipe clean – pause, individual completes step
    - Throw away – pause, individual completes step
    - Reinforcement!

Steps for Implementation

http://autismpdc.fpg.unc.edu/content/video-modeling

- The following steps provide a guideline for implementing a video model:

1. Identify a specific behavior to teach

2. Obtain necessary equipment
   - Equipment that records – video camera, mobile device such as an iPad or phone, hand-held camera
   - Equipment that shows video – mobile device, computer, TV

3. Plan all that is needed for the video recording
   - Create task analysis to follow
   - Write out scripts of what actors should say
   - Obtain props that may be needed

Steps for Implementation

http://autismpdc.fpg.unc.edu/content/video-modeling

4. Collect baseline data
   - Allow the individual to complete the behavior before making the video
   - Note the skills that learns can independently complete, as well as those skills that require assistance
   - Provides a guideline for what should be shown in the video – focus on skills that require assistance

5. Make the video
   - Determine the type of video model to make
   - Note the environment where the video should be made

Steps for Implementation

http://autismpdc.fpg.unc.edu/content/video-modeling

6. Arrange the environment
   - The environment must contain all materials necessary to perform the skill
   - Teach in a natural setting where the target behavior is typically performed
   - Must be functional, allowing for the skill to be practiced in a natural environment

7. Show the video
   - Have the learner view the entire video if utilizing a video model, or a segment of the video at a time if utilizing a video prompt
   - Evaluate the number of times the video should be showed to the learner before having them complete the skill

Steps for Implementation

http://autismpdc.fpg.unc.edu/content/video-modeling

8. Monitor the individual's progress with the skill
   - Identify whether the individual is making progress by collecting data
     - Using a task analysis of the behavior, it may be helpful to document what steps were correctly and incorrectly performed
     - + and – data is a quick way to record how the child performs the skill and can help to determine the amount of learning that has occurred as a result of the video model

9. Troubleshoot if progress is not being made
   - Consider altering the implementation of the intervention if individual is not making progress in the skill
     - Things to consider:
     - Show the video more often
     - Increase attending to the video
     - Is reinforcement provided after completing skill, is it effective?
     - Appropriate assistance provided to complete skill
     - Does the learner have the prerequisite skills necessary to complete skill?

Pros of Video Models

(Ganz, Earles—Vollrath, & Cook, 2011)
(Marcus & Wilder, 2009)
(Baker, Lang, & O'Reilly, 2009)

- Easy to create
  - Many mobile device apps can provide tools to create video models
  - Can be conveniently created using a cell phone, digital camera, or camcorder
  - Most difficult video model to create is video self-monitoring – may require editing in order to remove prompts provided from instructor

- Easy to implement
  - Using a video model does not require the trainer to hold a specific level of skill
  - Video models can be easily implemented with other prompting strategies
  - Can be viewed anywhere, any time, for as many times as necessary

Pros of Video Models

(Ganz, Earles—Vollrath, & Cook, 2011)
(Marcus & Wilder, 2009)
(Baker, Lang, & O'Reilly, 2009)

- Low in cost to create
- Low in cost to utilize compared to the use of *in vivo* training with therapists or other professionals
- Greater opportunity to show multiple stimulus and response exemplars
  - leads to a greater change to generalize skill to different settings, people, and stimuli

Why are Video Models Effective?

(Ganz, Earles—Vollrath, & Cook, 2011)

- Visual interventions may provide a more effective form of learning for many with ASD
  - Visual prompts may allow learners the opportunity to focus and attend to the skill presented better than another method of teaching
  - Complex skills that are shown using video models can help with consistency and eliminates staff variability
  - Enables the learner to be more independent and results in less reliance on staff implementation
  - For some, it may be more enjoyable to view a model prompt via video than in-person

Demographics of Participants

http://autismpdc.fpg.unc.edu/content/video-modeling

- Research has shown that video modeling has proven to be effective for:
  - Individuals ranging in ages from early childhood to adult
  - Low functioning to high functioning individuals with developmental disabilities
  - Specific skills taught include:
    - How to listen to music, watch videos, and access photos using an iPod
    - Appropriate classroom behaviors
    - How to play a video game
    - How to make coffee and microwave popcorn
    - Social initiation
    - Play skills
    - A variety of cleaning tasks
    - Cooking skills
    - And many others...

A Note on Treatment Integrity

Digennaro-Reed, Codding, Catania, & Maguire, 2010)

- What is treatment integrity?
  - The degree in which the intervention is implemented accurately and consistently
  - Some questions you may ask to determine treatment integrity may include:
    - Is the intervention being implemented as planned?
    - Is the intervention being implemented the same way, each and every time?
    - Is the intervention being implemented with fidelity?

A Note on Treatment Integrity

(Digennaro-Reed, Codding, Catania, & Maguire, 2010)

- Do video models produce treatment integrity?
  - Research examined the use of a video modeling intervention compared to a video modeling with performance feedback intervention to determine the treatment integrity of teachers in implementing a behavioral intervention

- They found that both interventions produced an increase in correct implementation of the intervention following training from a video model

- Video modeling with performance feedback resulted in 100% of correct procedural implementation!

A Note on Treatment Integrity

(Bellini & Akullian, 2007)

- It is crucial to measure if the intervention was implemented the way it was intended to – few studies measure this!

- Video modeling interventions should ensure fidelity of implementation
  - Proficiency with using technology to film and view the video is required
  - Individual must be proficient in editing footage, if necessary

- How can this be measured?
  - Checklists to ensure every implementation of all intervention components
  - Documentation of whether individual attends to video

Social Validity

(Cooper, Heron, & Heward, 2007)
(Delano, 2007)

- What is social validity?
  - How socially acceptable the intervention procedure is
  - Is the intervention appropriate?
  - Has the intervention led to a socially significant change in behaviors?

- Once can identify the social validity of video modeling interventions by:
  - Pre- and posttest questionnaires for teachers, parents, etc. to determine effectiveness of intervention
  - Pre- and posttest interviews of teachers, parents, etc. to determine effectiveness of intervention
  - Identifying the amount of change in the dependent variable
  - Determining how easy it was to implement intervention
  - Determing the cost of the intervention

Maintenance and Generalization

(Cooper, Heron, & Heward, 2007)
(Delano, 2007)

- What is response maintenance?
  - Upon terminated the intervention, the ability of the learner to continue to perform the target behavior
- What is generalization?
  - The ability to perform the target behavior in an environment that is different from the instructional setting
  - The ability to perform untrained behaviors that are functionally related to the trained target behavior
  - Changing the behaviors of others that have not been directly trained

- Video modeling interventions have shown to have a high degree of response maintenance and generalization

Skills Taught Using Video Modeling

http://autismpdc.fpg.unc.edu/content/video-modeling

- Research has shown that video modeling has proven to be effective in teaching individuals with developmental disabilities a variety of skills, including:

- Communication and social skills
- Play skills
- Downtime/leisure skills
- Daily living skills
- Vocational/job skills
- Behavior management

- The following slides will present a review of literature that support the use of video modeling to teach the skills listed above

Communication, Play, and Social Skills

- The following studies have shown the effectiveness of video modeling and prompting to increase communication, play, and social skills

- The interventions that have been shown to increase communication, play and social skills can be applied across many environments:

  - Within educational and clinical settings there may be opportunities to practice skills with others
  - Providing video models are an efficient, simple way for instructors to provide interventions – more reliance on video than instructor and instructor's skill level
  - Using video models in the home can provide additional training and increase interaction with family
  - Using portable devices, video models can be viewed within the community to teach communication, play, and social skills with others they may encounter

Video Modeling to Increase Social Inititation

(Nikopoulos & Keenan, 2003)

- Improving social initiation will lead to an all-around improved social interaction with others
- Video modeling has been shown to assist with teaching the skill of social initiation
- The use of a video model has been shown to impact the quality of conversation and decrease unwanted behavior , as well as other socially significant behaviors

Video Modeling to Increase Social Inititation

(Nikopoulos & Keenan, 2003)

- Research has studied the impact that video modeling has on social initiation and play skills
  - Video model used – 35 second video showing an example of social initiation

- Results:
  - The majority of participants increased social initiation and appropriate play following the intervention as well as during follow-up

  - Individuals were more likely to socially initiate when a toy was present

  - **With the increase of social initiation came an increase in appropriate play and a decrease in unwanted, maladaptive behaviors such as self-stimulatory behaviors**

Video Modeling to Increase Motor and Verbal Play

(D'ateno, Mangiapanello, & Taylor, 2003)

- Individuals with developmental disabilities often lack the skills and the desire to engage in appropriate play with peers
- Research aimed to study the effect that video modeling had on increasing motor and verbal play sequences of children
- Video modeling has shown to be effective on the acquisition of conversational skills and play behaviors of children with autism

Video Modeling to Increase Motor and Verbal Play

(D'ateno, Mangiapanello, & Taylor, 2003)

- Video model used – models depicting 3 different play sequences; each video contained an adult who read from a script while playing with the toy associated with the script. Play sequences included:
  - A tea party
  - Baking
  - Shopping

- Results:
  - The participant increased the number of modeled motor responses and scripted verbal responses following intervention – the participant learned many responses within the video model

Video Modeling to Increase Social Expression

(Charlop, Dennis, Carpenter, & Greenberg, 2010)

- Individuals with autism often lack the ability to engage in appropriate social expression
- Communicating with others may be difficult and many lack the ability to read other's subtle communication cues in addition to displaying appropriate cues themselves
- Research focused on teaching children with autism to display 4 behaviors while engaging in a social interaction:
  - Appropriate verbal comments
  - Intonation
  - Gestures
  - Facial expression

Video Modeling to Increase Social Expression

(Charlop, Dennis, Carpenter, & Greenberg, 2010)

- Video model used:
  - 2 adults acted out a scenario where one person presented a situation and the other demonstrated the appropriate way to respond to it using appropriate verbal comments, intonation, gestures, and facial expressions.

- Results:
  - It was found that video modeling increased appropriate social expressive of children with autism

  - **Treatment also produced maintenance of the target behaviors, as well as generalization across settings, stimuli, and people**

Video Modeling to Teach Reciprocal Pretend Play

(MacDonald, Sacramone, Mansfield, Wiltz, & Ahearn, 2009)

- There are many reasons why individuals with developmental disabilities, specifically autism, do not engage in reciprocal pretend play with peers
- Children may not be reinforced by social interaction
- Many lack skills to appropriately communicate, to imitate others, and do not possess appropriate play skills
- Research has been done to examine the impact that video modeling has on the development of reciprocal pretend play in children with autism

Video Modeling to Teach Reciprocal Pretend Play

(MacDonald, Sacramone, Mansfield, Wiltz, & Ahearn, 2009)

- The inability to engage in pretend play is a deficit faced by many with autism and other developmental disabilities

- Video model used to increase reciprocal pretend play:

  - Adults were filmed interacting during a designated play activity. Scripts were followed based off observations of typical peer interactions. Adults interacted and manipulated toys during play

Video Modeling to Teach Reciprocal Pretend Play

(MacDonald, Sacramone, Mansfield, Wiltz, & Ahearn, 2009)

- Results:
  - Children showed an increase in the number of scripted behaviors during play.
  - Increase in acquired verbalizations and play actions
  - The children engaged in more novel verbalizations following interventions
  - Results were maintained over time

Peer Video Modeling VS. Self Video Modeling to teach appropriate responding

(Marcus & Wilder, 2009)

- Because of the deficits experienced by individuals with autism in regards to communication, it is necessary to specifically teach skills that may be developed naturally by typical peers
- Research examined the use of video modeling procedures and the impact they have on the acquisition of expressive identification
- Teaching expressive language results in increase communication
- Peer video modeling and self video modeling were compared in order to determine which was most effective in teaching the skill

Peer Video Modeling VS. Self Video Modeling to teach appropriate responding

(Marcus & Wilder, 2009)

- Video Models included:

- Peer video model:
  - A peer and friend of the participant was filmed answering a therapist's question
- Self video model:
  - The participant was filmed answering a therapist's question – the video was edited in order to remove prompting required by the therapist for the correct response

- Results:
  - Each participant reached criterion with the self video model, compared to only 1 participant who reached criterion after viewing the peer video model

Leisure and Downtime Skills

- The following studies have shown the effectiveness of video modeling and video prompting to teach leisure and downtime skills
- Applying video models can be effective in a variety of settings
- Within a clinical setting, it is extremely important to be able to structure downtime independently
  - The use of a video model enables users to learn leisure skills without the intrusive intervention of an instructor
  - Having independent downtime skills may result in a decrease in undesirable behavior
  - Teaching age-appropriate downtime skills results in a greater opportunity for increased peer interaction and communication
- Within the home, teaching via video models allows for additional practice to increase appropriate independent leisure skills, as well as increased reliance on the video rather than the parent

Video Modeling to Teach How to Use an iPod

(Kagohara, Sigafoos, Achmadi, van der Meer, O'Reilly, & Lancioni, 2011)
(Kagohara, 2011)
(Hammond, Whatley, Ayers, & Gast, 2010)

- Portable technology can be utilized in many ways. Most commonly, individuals use this technology for leisure and downtime
- Use of technology, specifically iPods, has become mainstream among today's youth
- It is important for individuals with developmental disabilities to engage in age-appropriate leisure activities
- Age-appropriate leisure activities, at times, must be specifically taught to individuals with autism
- Teaching individuals with developmental disabilities to use today's technology allows them to utilize age appropriate downtime and fit in with their peers

Video Modeling to Teach How to Use an iPod

Kagohara, Sigafoos, Achmadi, van der Meer, O'Reilly, and Lancioni (2011)

- Research studied the impact that video modeling had on teaching participants with developmental disabilities to listen to music using an iPod Touch.
  - The video model – a video on an iPod showed the user how to access and listen to music
  - The use of the video model increased the percentage of correctly performed steps of the chain and each participant demonstrated 80% mastery

Video Modeling to Teach How to Use an iPod

(Kagohara, 2011)

- Research has studied the use of video modeling to teach three individuals with developmental disabilities how to watch videos using an iPod
  - The video model – a video on an iPod was shown to the participants demonstrating how to access and watch videos on the device
  - The intervention was shown to increase the number of steps performed correctly in the chain

Video Modeling to Teach How to Use an iPod

(Hammond, Whatley, Ayers, & Gast, 2010)

- Computer video modeling was used to teach participants skills to access several iPod capabilities including:
  - Accessing movies
  - Accessing photos
  - Accessing music
- Video model: via computer, participants viewed a video model for each skill
- It was found that following intervention, participants were able to learn each skill taught following a video model

Video Modeling to Teach How to Use an iPod

- Within a clinical environment, learning to use an iPod is extremely beneficial
- There are many advantages to this technology:
  - Increased leisure skills
  - Increased independence
  - Age-appropriate
  - Socially acceptable
  - Access to immediate reinforcement
  - Increased peer interaction
  - Increased communication and socialization
- At SBSA, many consumers have access to portable devices, specifically the iPad and iTouch

Video Modeling to Teach Video Games

(Dimaya, Reeve, Reeve, & Hoch, 2010)

- Another study examined teaching age-appropriate leisure skills using a video modeling produre

- Research focused on developing an intervention to teach an age-appropriate skill of playing a video game to children with autism

Video Modeling to Teach Video Games

(Dimaya, Reeve, Reeve, & Hoch, 2010)

- Intervention:
  - Combination intervention of a visual support system and video model
  - Video model – video that played simultaneously during game play in order to teach correct note selection for 4 different songs
  - Visual support system – steps to follow including setting up the game, starting the game, and turning it off after playing

- Results:
  - It was found that participants increased the percentage of correctly completed schedule components and the percentage of intervals of on-task behavior following the intervention

Behavior Management

(Baker, Lang, & O'Reilly, 2009)

- The following studies have shown the effectiveness of video modeling and prompting to increase appropriate behaviors and to decrease inappropriate behaviors

- Using video modeling to manage behavior can be done within a variety of environments for many different behaviors

- Video modeling may be effective for individuals that engage in behaviors such as:
  - Behaviors that are disruptive
  - Off-task behaviors
  - Behaviors that impede academic success
  - Inappropriate peer interactions that inhibit peer relationships

Behavior Management

(Baker, Lang, & O'Reilly, 2009)

- What type of video model is used in behavior management interventions?
  - The individual can be recorded while engaged in the target behavior
  - Peers, novel people can be recorded engaged in target behavior
  - Behaviors to be increased can be filmed, using the individual or someone else

- Within a classroom setting, interventions using a video model are easy to implement
  - Reliance is on the model and not the instructor

Behavior Management

(Baker, Lang, & O'Reilly, 2009)

- Within behavior management procedures, video modeling is the main component within each intervention with additional components occasionally added, including:
  - Reinforcement
  - Self-monitoring
  - Discussion
  - Self-evaluation
  - Behavior conference
  - Role play
  - Researcher questioning
  - Observation discussion

Behavior Management

(Baker, Lang, & O'Reilly, 2009)

- A review of literature found that video modeling was used to increase the following:
  - Peer interaction
    - Verbal praise
    - Positive gestures
    - Supportive touches
  - On-task behaviors
    - Compliance of teacher's requests
    - Attending to teacher
    - Sitting at desk and completing task in an appropriate manner

Behavior Management

(Baker, Lang, & O'Reilly, 2009)

- A review of literature found that video modeling was used to decrease the following:
  - Inappropriate behaviors, including:
    - Aggression
    - Self-injurious behaviors
    - Fighting with peers
    - Off-task, inattentive
    - Leaving the instructional area

Video Modeling to Decrease Disruptive Behavior

(Blood, Johnsons, Ridenour, Simmons, & Crouch, 2011)

- Video modeling can be used to increase appropriate behaviors and decrease inappropriate behaviors

- Research compared a video modeling intervention with a video modeling and self-monitoring intervention to determine which was most effective on disruptive behavior
  - Video model – a video that showed peers engaged in behaviors considered appropriate for class
  - Self-monitoring – utilizing an iPod touch, the participant monitoring on-task and off-task behaviors

- The intervention package consisting of both interventions produced the lowest amount of disruption and the highest amount of on-task behavior

Self-Modeling to Increase On-Task Behavior

(Clare, Jenson, Kehle, & Bray, 2000)

- Video modeling can be used to increase on-task behaviors of students within a classroom environment
- Research studied the use of a video self-model and it's impact on on-task behaviors

- Video self-model:
  - each of the 3 students targeted were filmed engaged in the target behavior to increase, being on-task and sitting appropriately in class
- Results:
  - showed the intervention produced a significant, immediate increase in on-task behaviors
  - Results were maintained at follow-up as well

Daily Living and Vocational Skills

- The following studies have shown the effectiveness of video modeling and prompting to increase daily living skills and vocational job skills

- Video modeling and video prompting has been shown to increase independence in individuals with developmental disabilities

- Skills that have been taught:
  - Making coffee
  - Making popcorn
  - Teaching cooking skills
  - Washing dishes
  - Job-related skills

Video Modeling to Teach Making Coffee

(Bidwell & Rehfeldt, 2004)

- It is important to teach individuals with intellectual disabilities skills that will increase independence and their quality of life
- Research examined the use of video modeling to teach a daily living skill (making coffee), as well as a simple social skill to individuals with intellectual disabilities
  - Video Model – 5 minute video that showed the steps required for someone making coffee
- The intervention demonstrated an increase in the number of steps correctly performed

Video Prompting to Teach Making Popcorn

(Sigafoos, et al., 2005)

- There are benefits of individuals with developmental disabilities to learning daily living skills – increases independence and quality of life
- Research examined the impact that video prompting had on the acquisition of a daily living skill
  - Video prompt: a task analysis for making microwave popcorn was shown to participants using a video prompt on a computer screen
  - 2 of the 3 participants followed the chain and reached 100% mastery up to 6 consecutive times
  - At follow-up, they continued to perform at least 80% of the chain independently

Video Prompting to Teach Cooking Skills

(Graves, Collins, Schuster, and Kleinert, 2005)

- There are a variety of studies that have examined the impact of using a video to teach skills to individuals with intellectual disabilities
- Skills that can be taught via video instruction include hygiene, money skills, and a variety of daily living skills
- Research examined the impact that video prompting had on the acquisition of cooking skills and whether the skills could generalize across settings, stimuli, and novel individuals

Step by Step
www.stepbystepacademy.org

Special Learning
www.special-learning.com

Video Prompting to Teach Cooking Skills

(Graves, Collins, Schuster, and Kleinert, 2005)

- Video prompt:
  - a video shown demonstrating the task, following direction to complete the task. Next, a video prompt was shown for each step within the chain. Every step was followed by a given interval of time where the participants would then complete the step

- Results:
  - Participants were successfully taught to prepare food
  - It was reported that the participants were able to generalize their newly acquired skills, demonstrating the ability to make food at home, as well as maintaining the skill over time

Step by Step
www.stepbystepacademy.org

Special Learning
www.special-learning.com

Video Prompting to Teach Washing Dishes

(Sigafoos, et al., 2007))

- Individuals with developmental disabilities may have difficulties attending to a video model
- Video prompts may enable learners to attend – shorter clips are viewed, while allowing the individual to practice the skill along with viewing the chain of behaviors
- Research examined the effects of video prompts on the acquisition of a daily living skill, washing dishes

Video Prompting to Teach Washing Dishes

(Sigafoos, et al., 2007))

- Video prompt:
  - video prompts including someone washing dishes were shown to the participants, a "chunking" procedure was also used to fade prompts
  - "chunking" – a prompt fading procedure that combined prompts together to make several different "chunks" gradually decreasing the amount of chucks to make 1 video

- Results:
  - The video prompt resulted in teaching participants to wash dishes

Video Prompting to Teach Job Skills

(Van Laarhoven, Johnson, Van Laarhoven-Myers, Grider, and Grider, 2009)

- It is necessary to find inexpensive, effective training tools to assist in job training
- Research studied the impact of a technology-based intervention on the acquisition of new job tasks
  - Video prompt – on an iPod, prompts were shown for a variety of cleaning tasks including cleaning the bathroom and animal kennels, mopping the floor, and emptying the garbage
  - The iPod proved to be an effective training tool
  - Using an iPod for training resulted in an increase in independent responding and a decrease in prompting
  - Criterion for each task was met quickly

Video-Assisted Training to Increase Social Skills

(Morgan & Salzberg, 1992)

- Social skills may need to be taught to individuals with developmental disabilities prior to gaining employment

- Important social skills within an employment setting include:
  - Knowing when and how to ask for help
  - Knowing when and how to report any problems that may arise

- Research examined the impact that a video model has on the increase of employment-related social skill behaviors of adults

Video-Assisted Training to Increase Social Skills

(Morgan & Salzberg, 1992)

- Video model:
  - An individual performed the behavior to increase
- They were then asked to answer some questions regarding the video, related to the behavior of the model
- Correct answers were rewarded
- Results: this intervention alone did not produce desirable results

- Additional interventions included:
  - Video discrimination training with a self-model
  - Self-model with a familiar supervisor
  - Self-model with a familiar supervisor, and behavioral rehearsal

Video-Assisted Training to Increase Social Skills

(Morgan & Salzberg, 1992)

- Interventions to produce the highest rate of responding:
  - Self-model and familiar supervisor – a supervisor that the individual was familiar with was delivering instruction in the video
  - Self-model, familiar supervisor, and behavioral rehearsal – similar to other intervention, but required the individual to practice the skill after viewing the work problem

Video Modeling vs. Video Prompting to teach DLS

- The following study compared 2 video modeling procedures in order to determine which was most effective

- Researchers discussed the need to identify a teaching method that leads to greater skill acquisition
  - Does video modeling or video prompting result in the greatest increase of learned skills?

Video Modeling vs. Video Prompting

(Canella-Malone, et al., 2011)

- Research aimed to identify which teaching methodology resulted in a greater increase of acquiring daily living skills
  - Video prompt – participants viewed the video one step at a time and followed each individual set to complete the skill
  - Video model – participants viewed the entire sequence of the task to be completed prior to beginning the task
  - It was found that video prompting resulted in a greater percentage of steps correctly performed for 2 daily living skills

Outcomes

- Now that you've completed ***Video Modeling and Video Prompting as a treatment intervention***, you can now:

1. Describe what it means to prompt with a model.
2. List various types of video prompting methods and identify their similarities and differences.
3. Discuss skills that may benefit from using this intervention and supporting research.
4. Summarize ways in which video modeling and video prompting interventions have been used as a treatment intervention

References

- Baker, S. D., Lang, R., & O'Reilly, M. (2009). Review of video modeling with students with emotional and behavioral disorders. *Education and Treatment of Children, 32*(3), 403-420.
- Bandura, A. (1986). Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bellini, S. & Akullian, J. (2007). A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders. Council for Exceptional Children, 73(3), 264-287.
- Bidwell, M. A. & Rehfeldt, R. A. (2004). Using video modeling to teach a domestic skill with an embedded social skill to adults with severe mental retardation. *Behavioral Interventions, 19*, 263-274. doi: 10.1002/bin.165
- Blood, E., Johnson, J. W., Ridenour, L., Simmons, K., & Crouch, S. (2011). Using an ipod touch to teach social and self management skills to an elementary student with emotional/behavioral disorders. *Education and Treatment of Children, 34*(3), 299-322.
- Blum-Dimaya, A., Reeve, S. A., Reeve, K. F., Hoch, H. (2010). Teaching children with autism to play a video game using activity schedules and game-embedded simultaneous video modeling. *Education and Treatment of Children, 33*(3), 351-370.

References

- Cannella-Malone, H. I., Fleming, C., Chung, Y., Wheeler, G. M., Basbagill, A. R., Singh, A. H. (2011). Teaching daily living skills to seven individuals with severe intellectual disabilities: a comparison of video prompting to video modeling. *Journal of Positive Behavior Interventions, 13*(3), 144-153. doi: 10.1177/1098300710366593
- Charlop, M. H., Dennis, B., Carpenter, M. H., & Greenberg, A. L. (2010). Teaching socially expressive behaviors to children with autism through video modeling. *Education and Treatment of Children, 33*(3), 371-393.
- Clare, S. K., Jenson, W. R., Kehle, T. J., & Bray, M. A. (2000). Self-modeling as a treatment for increasing on-task behavior. *Psychology in the Schools, 37*(6), 517-522.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). Applied Behavior Analysis(2nd Ed). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Digennaro-Reed, F. D., Codding R., Catania, C. N., & Maguire, H. (2010). Effects of video modeling on treatment integrity of behavioral interventions. *Journal of Applied Behavior Analysis, 43*, 291-295.
- Graves, T. B., Collins, B. C., Schuster, J. W., & Kleinert, H. (2005). Using video prompting to teach cooking skills to secondary students with moderate disabilities. *Education and Training in Developmental Disabilities, 40*(1), 34-46.

References

- Hammond, D. L., Whatley, A. D., Ayres, K. M., & Gast, D . (2010). Effectiveness of video modeling to teach ipod use to students with moderate intellectual disabilities. *Education and Training in Autism and Developmental Disabilities, 45*(4), 525-538.
- Kagohara, D. M., Sigafoos, J., Achmadi, D., van der Meer, L., O'Reilly, M. F., & Lancioni, G. E. (2011). Teaching students with developmental disabilities to operate an ipod touch to listen to music. *Research in Developmental Disabilities, 32*, 2987-2992.
- Kagohara, D. M. (2011). Three students with developmental disabilities learn to operate an ipod to access age-appropriate entertainment videos. *Journal of Behavioral Education, 20*, 33-43. doi: 10.1007/s10864-010-9115-4
- MacDonald, R., Sacramone, S., Mansfield, R., Wiltz, K., Ahearn, W. H. (2009). Using video modeling to teach reciprocal pretend play to children with autism. *Journal of Applied Behavior Analysis, 42*, 43-55.
- Marcus, A. & Wilder, D. A. (2009). A comparison of peer video modeling and self video modeling to teach textual responses in children with autism. *Journal of Applied Behavior Analysis, 42*, 335-341.
- Morgan R. L. & Salzberg, C. L. (1992). Effects of video-assisted training on employment-related social skills of adults with severe mental retardation. *Journal of Applied Behavior Analysis, 25*, 365-383.

References

- National Professional Development Center on Autism Spectrum Disorders. (2012). Evidence-based practice: video modeling. Retrieved from http://autismpdc.fpg.unc.edu/content/video-modeling
- National Professional Development Center on Autism Spectrum Disorders. (2012). Steps for implementation: video modeling. Retrieved from http://autismpdc.fpg.unc.edu/sites/autismpdc.fpg.unc.edu/files/VideoModeling_Steps_0.pdf
- Nikopoulos, C. K. & Keenan, M. (2003). Promoting social initiation in children with autism using video modeling. *Behavioral Interventions, 18*, 87-108. doi: 10.1002/bin.129
- Sigafoos, J., O'Reilly, M., Cannella, H., Edrisinha, C., de la Cruz, B., Upadhyaya, M., Lancioni, G. E., Hundley, A., Andrews, A., Garver, C., & Young, D. (2007). Evaluation of a video prompting and fading procedure for teaching dish washing skills to adults with developmental disabilities. *Journal of Behavioral Education, 16*(2), 93-109. doi: 10.1007/s10864-006-9004-z
- Sigafoos, J., O'Reilly, M., Cannella, H., Upadhyaya, M., Edrisinha, C., Lancioni, G. E., Hundley, A., Andrews, A., Garver, C., & Young, D. (2005). Computer-presented video prompting for teaching microwave oven use to three adults with developmental disabilities. *Journal of Behavioral Education, 14*(3), 189-201. doi: 10.1007/s10864-005-6297-2
- Van Laarhoven, T., Johnson, J. W., Van Laarhoven-Myers, T., Grider, K. L., & Grider, K. M. (2009). The effectiveness of using a video ipod as a prompting device in employment settings. *Journal of Behavioral Education, 18*, 119-141. doi: 10.1007/s10864-009-9007-6

End Code: ml21012e

Video Modeling and Video Prompting as a Treatment Intervention

1. **CE Credits:** This training is eligible for *type of CE eligibility here* credits
2. **CE Credits:** You will need the “Begin” and “End” codes to apply for CEU credits.
3. **To apply for CE Credits, go to:**

http://www.special-learning.com/webinar/august/video_modeling/credits

Video Modeling and Video Prompting as a Treatment Intervention

Downloadable tools are available at:

http://www.special-learning.com/webinar/august/video_modeling/resources

Video Modeling and Video Prompting as a Treatment Intervention

Special Learning

Thank you for attending Special Learning's Webcast Training Series

BEGIN CODE: ml21012s

END CODE: ml21012e

To learn about our additional training topics please visit:
http://www.special-learning.com/store/94/1

If you have any questions, please send us an email:
contact@special-learning.com